



Easy Series Automation and Control Essentials Catalog

Everything you need for your fit-for-purpose control panels

schneider-electric.com

Life Is On

Schneider
Electric

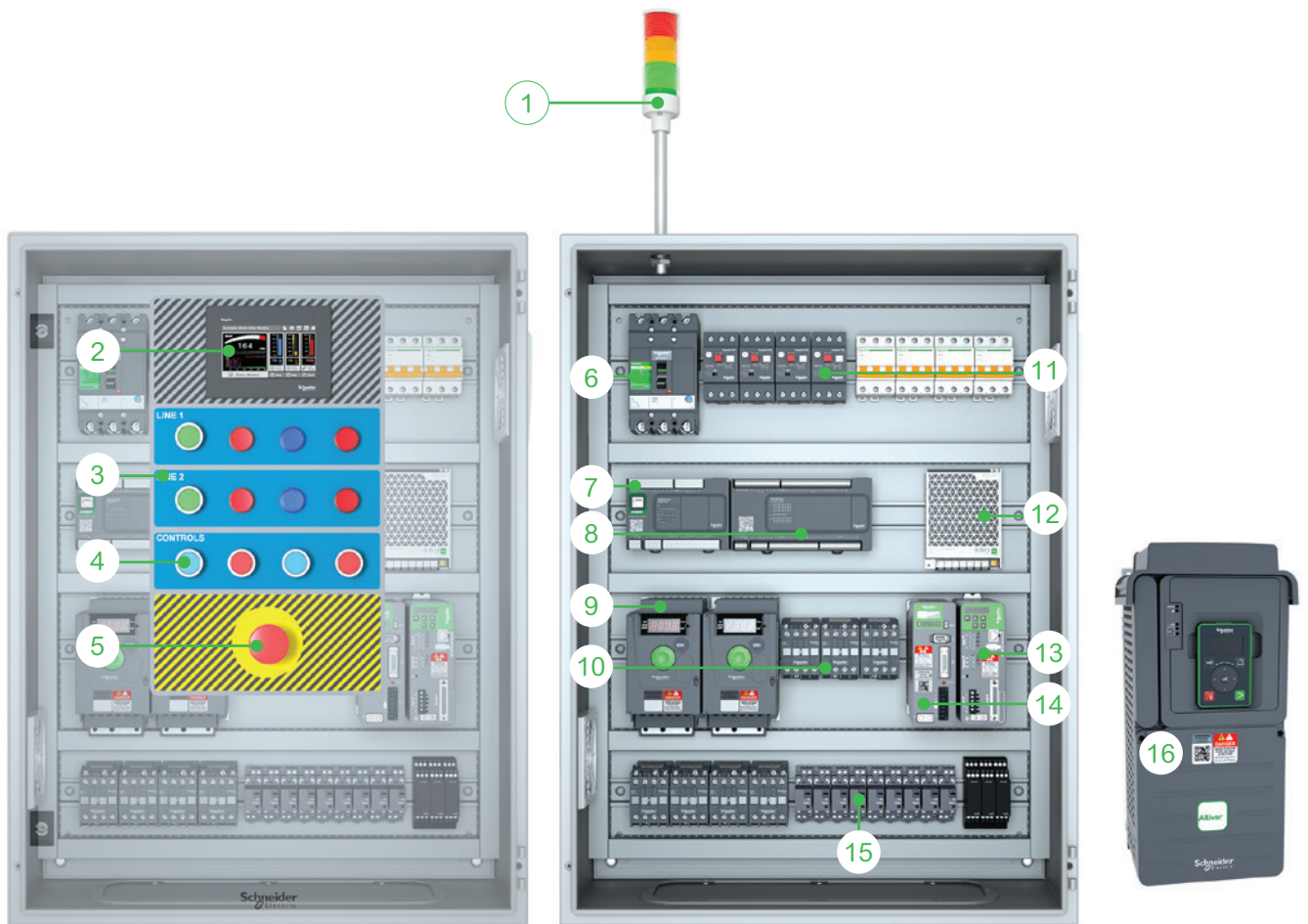


The Essentials for your control panels

Within this catalog you'll find all the components you need to deliver high core performance focused industrial control panels and machines.

The catalog will help you build your fit-for-purpose equipment faster and boost the efficiency of your industrial automation business.

New 2019 product highlights



- | | | | |
|---|--|----|---|
| 1 | Easy Harmony XVG Tower Light | 9 | Easy Altivar ATV 310 Variable Speed Drives |
| 2 | Easy Harmony GXU | 10 | EasyPact TVS Contactor |
| 3 | Harmony Customizable Legend Panel | 11 | EasyPact TVS Motor Protection Circuit Breaker |
| 4 | Easy Harmony XA2 Pushbuttons | 12 | Easy Modicon ABL2 Power Supply |
| 5 | Easy Harmony XA2 Emergency Switching off Pushbuttons | 13 | Easy Lexium 26 Servo |
| 6 | EasyPact CVS Protection of Distribution System | 14 | Easy Lexium 16 Servo |
| 7 | Easy Modicon M200 Logic Controller | 15 | Easy Harmony RXM Electromechanical Relays |
| 8 | Easy Modicon M100 Logic Controller | 16 | Easy Altivar ATV 610 Variable Speed Drives |

Make your everyday work smoother and easier

As a machine builder or panel builder, you need a reliable source of products to deliver high core performance focused equipment and services on time.

When working with Schneider, you've got that covered.

See for yourself!

Count on a reliable partner for your business

With Schneider Electric, a world leader in automation and control, you get reliable, robust, and affordable products for you and your customers.

Our global network of local distributors ensures high product availability and quick delivery times. So you can easily meet your deadlines.



When just enough is just right!

Save time on component selection with this catalog of automation and control essentials. Use our handy online selectors and configurators to easily find the best solution for your specific application and all the technical information you need.

Our tools help machine builders and panel builders improve the efficiency of their everyday work and build fit-for-purpose equipment with high core performance quicker.

Take advantage of learning opportunities

Gain access to our diverse learning resources, providing practical knowledge and tips, and open new opportunities for your business.

Explore the manuals, tutorials, “how to” videos, and online courses to broaden your skills and make your daily work faster and simpler.

- 1 Go to product selectors and configurators
- 2 Download the digital catalog
- 3 Explore our learning resources





Get all the products
you need from a distributor
close to you

General contents

01	Easy Harmony control and signaling.....	6
02	Easy Harmony GXU small and essential panels.....	10
03	EasyPact motor control and protection of distribution system.....	14
04	Easy Altivar variable speed drives.....	28
05	Easy Harmony electromechanical relays.....	36
06	Easy Modicon ABL2 power supplies.....	38
07	Easy Lexium motion control.....	40
08	Easy Modicon Logic controllers.....	56



01. Easy Harmony
pushbuttons, switches, pilot
lights and signaling devices

Easy Harmony XVG Ø 60 monolithic tower lights



1 With base mounting			
Voltage		24 VAC/VDC	
Light source		LED for steady light	
Colors (1)		● Red, ● Green	● Red, ● Amber, ● Green, ● Blue
Reference	Without buzzer, IP 53	XVGB2W	XVGB3W
	With buzzer, IP 42	XVGB2SW	XVGB3SW
			XVGB4W
			XVGB4SW
2 With direct aluminium tube mounting			
Voltage		24 VAC/VDC	
Light source		LED for steady light	
Colors (1)		● Red, ● Green	● Red, ● Amber, ● Green, ● Blue
Reference	Without buzzer, IP 23	XVGB2T	XVGB3T
	With buzzer, IP 23	XVGB2ST	XVGB3ST
			XVGB4T
			XVGB4ST
3 With aluminium tube mounting and L-bracket			
Voltage		24 VAC/VDC	
Light source		LED for steady light	
Colors (1)		● Red, ● Green	● Red, ● Amber, ● Green, ● Blue
Reference	Without buzzer, IP 23	XVGB2	XVGB3
	With buzzer, IP 23	XVGB2S	XVGB3S
			XVGB4
			XVGB4S
4 With aluminium tube mounting and fixing plate			
Voltage		24 VAC/VDC	
Light source		LED for steady light	
Colors (1)		● Red, ● Green	● Red, ● Amber, ● Green, ● Blue
Reference	Without buzzer, IP 53	XVGB2H	XVGB3H
	With buzzer, IP 42	XVGB2SH	XVGB3SH
			XVGB4H
			XVGB4SH
5 With aluminium tube mounting and foldable bracket			
Voltage		24 VAC/VDC	
Light source		LED for steady light	
Colors (1)		● Red, ● Green	● Red, ● Amber, ● Green, ● Blue
Reference	Without buzzer, IP 53	XVGB2M	XVGB3M
	With buzzer, IP 42	XVGB2SM	XVGB3SM
			XVGB4M
			XVGB4SM
6 Accessories (for association)			
Color		● White	
Unit type		Folding mounting bracket for support tube mounting	Wall mounting bracket
Reference		XVGZ02 (2)	XVMZ02W (3)

(1) The colors are listed in the same order as the mounting order of the illuminated units (from top to bottom).

(2) Compatible with XVGB●H, XVGB●SH.

(3) Compatible with XVGB●T, XVGB●ST.

Easy Harmony XA2 plastic pushbuttons



1 Pushbuttons with flush push, unmarked

Color	○ White	● Black	● Green	● Red	● Yellow	● Blue	
Contact	NO			NC	NO		
Connection	Screw clamp terminals						
Complete product for standard mounting	Spring-return	XA2EA11	XA2EA21	XA2EA31	XA2EA42	XA2EA51	XA2EA61
	Push-push	XA2EH011	XA2EH021	XA2EH031	XA2EH042	XA2EH051	XA2EH061

2 Pushbuttons with flush push, marked

Color	○ White	● Black	● Green	● Red	● Red
Marking	A	↑	"I" (white)	"O" (white)	"STOP" (white)
Contact	NO			NC	NC
Connection	Screw clamp terminals				
Complete product for standard mounting	XA2EA3341	XA2EA3351	XA2EA3311	XA2EA4322	XA2EA4342



3 Trigger action Emergency stop mushroom head pushbuttons

Color	● Red				
Diameter of head	Ø 40	Ø 30	Ø 40	Ø 60	Ø 30
Contact	NC Push-pull		NC Turn to release		
Connection	Screw clamp terminals				
Complete product for standard mounting	XA2ET42	XA2ES442	XA2ES542	XA2ES642	XA2ES422

4 Mushroom head pushbuttons, spring return

Color	● Black	● Green	● Red	● Yellow	● Black
Diameter of head	Ø 40	Ø 40	Ø 40	Ø 40	Ø 60
Contact	NO		NC	NO	
Connection	Screw clamp terminals				
Complete product for standard mounting	XA2EC21	XA2EC31	XA2EC42	XA2EC51	XA2ER21



5 Selector switches

Positions	2 ∨	2 ∇	2 ∨	3 ∨	3 ∇	
Contact	NO		NO + NC	2 NO		
Connection	Screw clamp terminals					
Complete product for standard mounting	Standard handle	XA2ED21	XA2ED41	XA2ED25	XA2ED33	XA2ED53
	Long handle	XA2EJ21	–	XA2EJ25	XA2EJ33	XA2EJ53

6 Key switches

Positions	2 ∨	2 ∇	2 ∇	3 ∇	3 ∨	3 ∇	
Contact	NO	2 NO					
Connection	Screw clamp terminals						
Complete product for standard mounting	Key switch (No. 455)	XA2EG21	XA2EG43	XA2EG63	XA2EG73	XA2EG33	XA2EG03

Easy Harmony XA2 plastic pushbuttons



1 Pilot lights with integral LED

Color		<input type="radio"/> White	<input type="radio"/> Green	<input type="radio"/> Red	<input type="radio"/> Orange	<input type="radio"/> Blue	<input type="radio"/> Yellow
Connection		Screw clamp terminals					
Complete product for standard mounting	24 VAC/VDC	XA2EVB1LC	XA2EVB3LC	XA2EVB4LC	XA2EVB5LC	XA2EVB6LC	XA2EVB8LC
	110 VAC	XA2EVF1LC	XA2EVF3LC	XA2EVF4LC	XA2EVF5LC	XA2EVF6LC	XA2EVF8LC
	110 VDC	XA2EVFD1LC	XA2EVFD3LC	XA2EVFD4LC	XA2EVFD5LC	XA2EVFD6LC	XA2EVFD8LC
	220...230 VAC	XA2EVM1LC	XA2EVM3LC	XA2EVM4LC	XA2EVM5LC	XA2EVM6LC	XA2EVM8LC
	220 VDC	XA2EVM1LC	XA2EVM3LC	XA2EVM4LC	XA2EVM5LC	XA2EVM6LC	XA2EVM8LC
	380...400 VAC	XA2EVQ1LC	XA2EVQ3LC	XA2EVQ4LC	XA2EVQ5LC	XA2EVQ6LC	XA2EVQ8LC

2 Illuminated pushbuttons with integral LED

Color		<input type="radio"/> White	<input type="radio"/> Green	<input type="radio"/> Red	<input type="radio"/> Yellow	<input type="radio"/> Blue	<input type="radio"/> Red	
Contact		NO					NC	
Connection		Screw clamp terminals						
Complete product for standard mounting	24 VAC/VDC	XA2EW31B1	XA2EW33B1	XA2EW34B1	XA2EW35B1	XA2EW36B1	XA2EW34B2	
	220...230 VAC	XA2EW31M1	XA2EW33M1	XA2EW34M1	XA2EW35M1	XA2EW36M1	XA2EW34M2	
	380...400 VAC	XA2EW31Q1	XA2EW33Q1	XA2EW34Q1	XA2EW35Q1	XA2EW36Q1	XA2EW34Q2	

Accessories for Easy Harmony XA2 plastic pushbuttons



3 Contact functions (for all XA2 pushbuttons and switches)

Type	Contact function	
Contact	NO	NC
Connection	Screw clamp terminals	
Reference	ZA2EE101	ZA2EE102

4 Bulbs with BA 9s base fitting and associated accessories

Color	<input type="radio"/> White	<input type="radio"/> Green	<input type="radio"/> Red	<input type="radio"/> Yellow	<input type="radio"/> Blue
Voltage	24 VAC/VDC				
Reference	DL1LED241	DL1LED243	DL1LED244	DL1LED245	DL1LED246

5 Bezel tool

Application	Tightening head fixing nut
Reference	ZB5AZ905

6 Anti-rotation plate

Application	Prevents head from rotation
Reference	ZB5AZ902

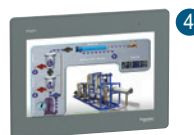


02. Easy Harmony Human Machine Interfaces (HMI) – small and essential panels

Easy Harmony GXU Essential panels



Easy Harmony GXU basic touch screen terminals with IP 65 degree of protection		
Screen size	7" ¹	10" ²
Screen resolution (pixels)	800 x 480 WVGA	
Touch screen or keypad	Touch screen	
Software	Vijeo Designer Basic	
Memory capacity	Application memory	32 MB
	Backup memory	128 KB
Communication	Serial line	9-way male SUB-D, RS-422/ RS-485 (COM1)
	USB connection	1 mini-B connector
Operating temperature	0...50 °C	
Industrial certifications	CE, EAC	
Cut-out (mm)	190 x 135	255 x 185
Dimensions (mm)	207 x 152 x 38	275 x 206 x 38
Reference	HMIGXU3500	HMIGXU5500



Easy Harmony GXU universal touch screen terminals with IP 65 degree of protection		
Screen size	7" ³	10" ⁴
Screen resolution (pixels)	800 x 480 WVGA	
Touch screen or keypad	Touch screen	
Software	Vijeo Designer Basic	
Memory capacity	Application memory	48 MB
	Backup memory	128 KB
Communication	Ethernet port	Ethernet 10/100BASE-TX
	Serial line	9-way male SUB-D, RS-232C (COM1) + 9-way male SUB-D, RS-422/RS485 (COM2)
	USB connection	1 type A connector + 1 mini-B connector
Operating temperature	0...50 °C	
Industrial certifications	CE, EAC	
Cut-out (mm)	190 x 135	255 x 185
Dimensions (mm)	207 x 152 x 38	275 x 206 x 38
Reference	HMIGXU3512	HMIGXU5512

2

Easy Harmony GXU - Programming Software and Accessories



Vijeo Designer Basic, programming software for Easy Harmony GXU Essential panels

Compatibility	All Easy Harmony GXU panels
Type of Vijeo Designer license	Single-station Build Time
Number of stations	1
Type of support	DVD
License duration	Unlimited
Reference	To download this software, visit Schneider Electric web site, Vijeo Designer Basic

2



Spare parts

Description	Set of fixing screws 1	Power supply connector 2
Compatibility	All Easy Harmony GXU models	
Reference	HMIZGFIX3	HMIZGPWS2



Connection accessories

Connection type	1 USB type A + 1 USB mini-B connector 3	1 USB mini-B connector 4	1 USB type A + 9-way SUB-D connector 5
Description	Enables connection of a PC (USB type A port) to Easy Harmony GXU terminals (USB mini-B port, all models) in order to transfer applications developed with Vijeo Designer Limited Edition	Enables the USB mini-B port to be located remotely on Easy Harmony GXU terminals (all models) on a panel or cabinet door while providing IP 65 degree of protection (Ø 21mm/0.83 in. fixing device)	Enables connection of an RS 232 serial link printer (9-way SUB-D) to the USB type A port of HMIGXU3512 and HMIGXU5512 terminals
Cable length (m)	1.8	1	1.8
Reference	BMXXCAUSB018	HMIZSUSBB	HMIZURS



Cables for connecting Easy Harmony GXU terminals to Schneider Electric products

Range compatibility	Twido, Modicon Premium automation platform, Modicon TSX Micro, Magelis HMI GTO	Modicon M340, Modicon M218, Modicon M238, Modicon M258, Modicon M221, Modicon M241, Modicon M251	Modicon Easy M100, Modicon Easy M200	TeSys U/T starters, Altivar drives, Altistart starters, Lexium motion control, Preventa XPS MC
Connection type	1 female connector mini-DIN, 8 pins 6	1 male connector RJ45 + SUB-D connector 7	1 female connector SUB-D 9/flying leadsat other end 8	1 male connector RJ45 + SUB-D connector 7
Interface	RS 485			
Communication protocol	Modbus		-	Modbus
Compatibility	All Easy Harmony GXU panels			
Cable length (m)	2.5			
Reference	XBTZ9018	XBTZ9008	XBTZG9722	XBTZ9008

Easy Harmony GXU - Accessories



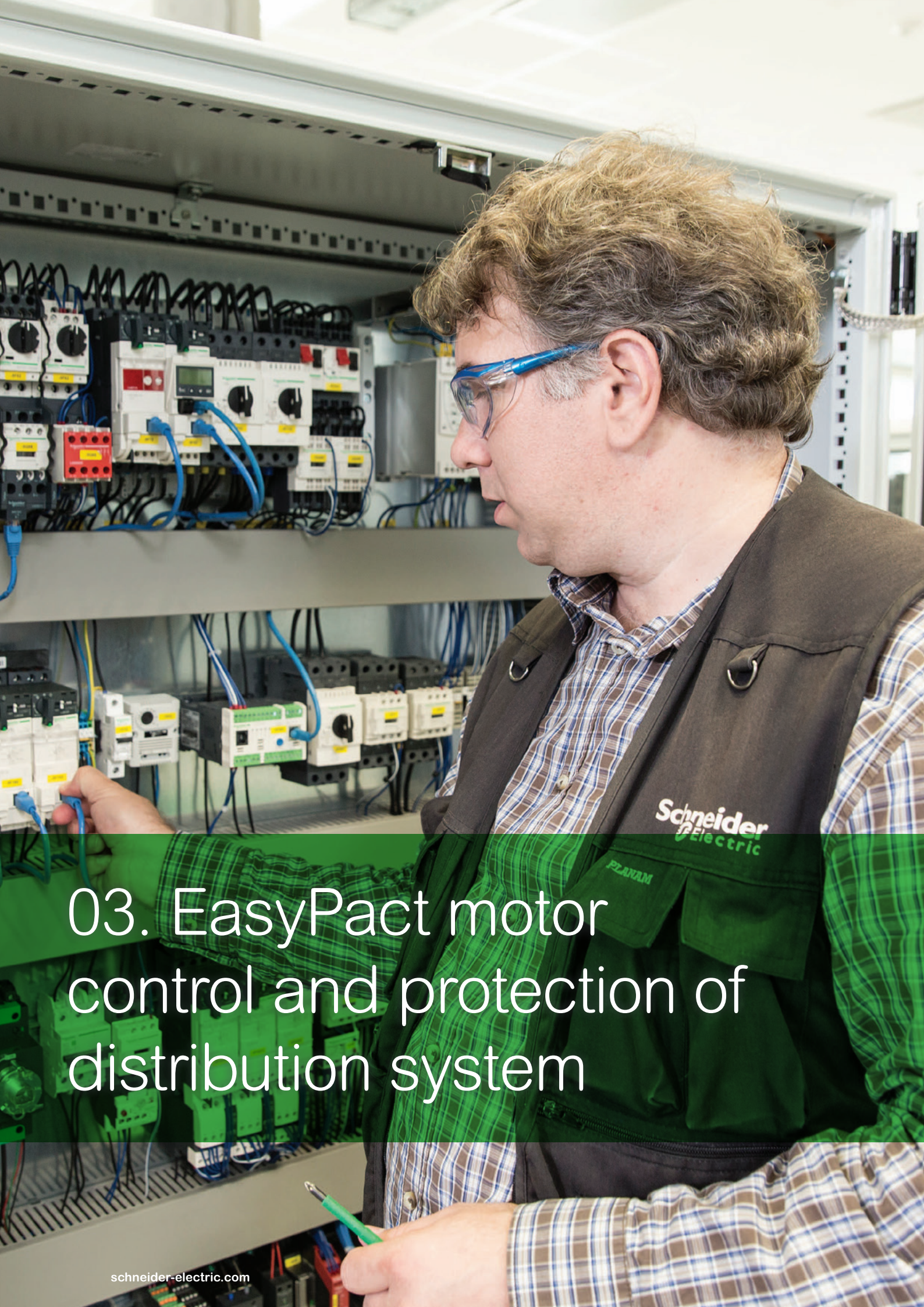
Cables for third-party PLCs							
Third-party PLCs	Mitsubishi, Melsec			Omron, Sysmac		Siemens, Simatic	Customizable cables
Compatibility	HMIGXU3512, HMIGXU5512		All Easy Harmony GXU models	HMIGXU3512, HMIGXU5512		All Easy Harmony GXU models	
Connection cable	Q Link (SIO)	Q CPU (SIO)	FX (CPU)	Link (SIO)	FINS (SIO)	MPI port, S7 200, S7 300/400	RS 422
Connection type	9-way SUB-D/ 9-way SUB-D 1	9-way SUB-D/mini-DIN 2		9-way SUB-D/ 25-way SUB-D 3	9-way SUB-D/ 9-way SUB-D 1		9-way SUB-D/ flying leads at other end 4
Interface	RS 232C		RS 422	RS 232C		RS 485	RS 422
Cable length (m)	5						
Reference	XBTZG9772	XBTZG9774	XBTZG9775	XBTZG9731	XBTZG9740	XBTZG9740 (1)	XBTZG9722

(1) Customized cable



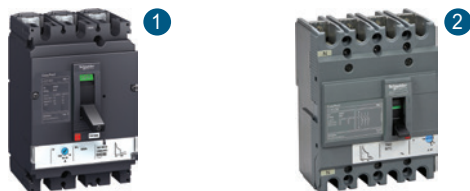
Connecting Easy Harmony GXU terminals via Modbus serial link		
Description	Modbus serial link	Power supply connector
Compatibility	All Easy Harmony GXU models	
Tap-off units	8-port Modbus splitter box LU9GC32-porttap junctionTWDXCAISO, and TWDXCAT3RJ	
Communication protocol	Modbus	
Connection type	1 male connector RJ45/9-way SUB-D	
Interface	RS 485	
Cable length (m)	2.5	
Reference	XBTZ9008	

2



03. EasyPact motor control and protection of distribution system

EasyPact CVS100/160/250B - complete fixed/FC device



EasyPact 100/160/250B, 25 kA 380/415 V - With TM-D thermal-magnetic trip unit

EasyPact CVS100B (25 kA at 380/415 V)

Rating		TM16D	TM25D	TM32D	TM40D	TM50D	TM63D	TM80D	TM100D
Poles	3P 3d ①	LV510300	LV510301	LV510302	LV510303	LV510304	LV510305	LV510306	LV510307
	4P 3d ②	LV510310	LV510311	LV510312	LV510313	LV510314	LV510315	LV510316	LV510317

EasyPact CVS160B (25 kA at 380/415 V)

Rating		TM100D	TM125D	TM165D
Poles	3P 3d ①	LV516301	LV516302	LV516303
	4P 3d ②	LV516311	LV516312	LV516313

EasyPact CVS250B (25 kA at 380/415 V)

Rating		TM160D	TM200D	TM250D
Poles	3P 3d ①	LV525301	LV525302	LV525303
	4P 3d ①	LV525311	LV525312	LV525313

EasyPact 100/160/250B, 25 kA 380/415 V - With Magnetic trip unit MA

EasyPact CVS100B (25 kA at 380/415 V)

Rating		MA2,5	MA6,3	MA12,5	MA25	MA50	MA100
Poles	3P 3d	LV510430	LV510431	LV510432	LV510433	LV510434	LV510435

EasyPact CVS160B (25 kA at 380/415 V)

Rating		MA100	MA150
Poles	3P 3d	LV516430	LV516431

EasyPact CVS250B (25 kA at 380/415 V)

Rating		MA150	MA220
Poles	3P 3d	LV525435	LV525436

EasyPact CVS100/160/250F - With MA magnetic trip unit

EasyPact CVS100B (25 kA at 380/415 V)

Rating		MA2.5	MA6.3	MA12.5	MA25	MA50	MA100
Poles	3P 3d	LV510440	LV510441	LV510442	LV510443	LV510444	LV510445

EasyPact CVS100B (25 kA at 380/415 V)

Rating		MA100	MA150
Poles	3P 3d	LV516439	LV516440

EasyPact CVS100B (25 kA at 380/415 V)

Rating		MA150	MA220
Poles	3P 3d	LV525438	LV525439

EasyPact CVS400/630F/N - With MA magnetic trip unit

Type		EasyPact CVS400F (36 kA at 380/415 V)	EasyPact CVS400N (50 kA at 380/415 V)	EasyPact CVS630F (36 kA at 380/415 V)	EasyPact CVS630N (50 kA at 380/415 V)
Rating		MA320	MA320	MA500	MA500
Poles	3P 3d	LV540550	LV540552	LV563550	LV563552



EasyPact CVS100/160/250 - Accessories



Connection accessories (Cu or Al)

Description	Bare cable connectors, steel ¹		Aluminium connectors ²				Aluminium connectors for 2 cables (1) ³	
	1 x (1.5 to 95 mm ²) ; ≤ 160 A		1 x (25 to 95 mm ²) ; ≤ 250 A		1 x (120 to 185 mm ²) ; ≤ 250 A		2 x (50 to 120 mm ²) ; ≤ 250 A	
	Set of 3	Set of 4	Set of 3	Set of 4	Set of 3	Set of 4	Set of 3	Set of 4
Reference	LV429242	LV429243	LV429227	LV429228	LV429259	LV429259	LV429218	LV429219



Description	Spreaders from 35 to 45 mm pitch (1) ⁴		Crimp lugs for copper cable (1) ⁵					
	-		For cable 120 mm ²		For cable 150 mm ²		For cable 185 mm ²	
	Set of 3	Set of 4	Set of 3	Set of 4	Set of 3	Set of 4	Set of 3	Set of 4
Reference	LV431563	LV431564	LV429252	LV429256	LV429253	LV429257	LV429254	LV429258



Description	Crimp lugs for aluminium cable (1) ⁶			
	For cable 150 mm ²		For cable 185 mm ²	
	Set of 3	Set of 4	Set of 3	Set of 4
Reference	LV429504	LV429505	LV429506	LV429507



Description	Insulation accessories							
	1 short terminal shield for breaker ⁷		1 long terminal shield for breaker ⁸		Interphase barriers for breaker ⁹		2 insulating screens for breaker (45 mm pitch) ¹⁰	
	3 P	4 P	3 P	4 P	Set of 6	3 P	4 P	
Reference	LV429515	LV429516	LV429517	LV429518	LV429329	LV429330	LV429331	



Rotary handles	
Description	Direct rotary handle - With black handle ¹¹
Reference	LV429337
Description	Extended rotary handle - With black handle ¹²
Reference	LV429338

(1) Supplied with 2 or 3 interphase barriers.

3

EasyPact CVS400/630F/N - complete fixed/FC device



EasyPact CVS400/630F - With TM-D thermal-magnetic trip unit				
Type	EasyPact CVS400F (36 kA at 380/415 V)		EasyPact CVS630F (36 kA at 380/415 V)	
Rating	TM320D		TM400D	TM500D
Poles	3P 3d (1)	LV540305	LV540306	LV563305
	4P 3d (2)	LV540308	LV540309	LV563308
Rating	TM600D		LV563306	LV563309
EasyPact CVS400/630F - ETS 2.3 electronic trip unit (LS ₀ I protection)				
Type	EasyPact CVS400F (36 kA at 380/415 V) - 400 A		EasyPact CVS630F (36 kA at 380/415 V) - 630 A	
Poles	3P 3d (1)	LV540505	LV563505	
	4P 3d, 4d, 3d + N/2 (2)	LV540506	LV563506	

EasyPact CVS400/630 - Accessories



Connection accessories (Cu or Al)				
Description	Aluminium connector (3)		Aluminium connector (4)	
	1x (35 to 300 mm ²)		2x (35 to 240 mm ²)	
Reference	Set of 3	Set of 4	Set of 3	Set of 4
	LV432479	LV432480	LV432481	LV432482
				Voltage plug for aluminium connector 1 or 2 cables (5)
				–
				Set of 10
				LV429348

Description	Spreaders (6)				Crimp lugs for copper cable (1) (7)			
	52.5 mm		70 mm		For cable 240 mm ²		For cable 300 mm ²	
Reference	3P	4P	3P	4P	Set of 3	Set of 4	Set of 3	Set of 4
	LV432490	LV432491	LV432492	LV432493	LV432500	LV432501	LV432502	LV432503

Description	Crimp lugs for aluminium cable (1) (8)			
	For cable 240 mm ²		For cable 300 mm ²	
Reference	Set of 3	Set of 4	Set of 3	Set of 4
	LV432504	LV432505	LV432506	LV432507

Description	Insulation accessories							
	Short terminal shield, 45 mm (1 piece) (9)		Long terminal shield, 45 mm (1 piece) (10)		Interphase barriers (11)		Long terminal shielded for spreaders, 52, 5mm (1 piece) (supplied with insulating plate) (12)	
Reference	3 P	4 P	3 P	4 P	Set of 6	3 P	4 P	2 insulating screens (70 mm pitch) (13)
	LV432591	LV432592	LV432593	LV432594	LV432570	LV432595	LV432596	LV432578
								LV432579

Description	Direct rotary handle - With standard black handle (14)		Standard extended rotary handle (15)	
	LV432597		LV432598	

(1) Supplied with 2 or 3 interphase barriers.



EasyPact TVS 3-pole contactors from 6 to 630 A



EasyPact TVS 3-pole contactors

Size	1 ①					2 ②			3 ③		
Rated operational current AC-3 (A) (1)	6	9	12	18	25	32	38	40	50	65	
Rated operational current AC-1 (A) (2)	20	25		32	36	50		60	70	80	
Rated operational power in AC-3 (kW)	220/230 V	1.1	2.2	3	4	5.5	7.5	9	11	15	18.5
	380/400 V	2.2	4	5.5	7.5	11	15	18.5	18.5	22	30
	415/440 V	2.2	4	5.5	9	11	15	18.5	22	25/30	37
	500 V	3	5.5	7.5	10	15	18.5	18.5	22	30	37
660/690 V	3	5.5	7.5	10	15	18.5	18.5	30	33	37	
Width (mm)	45					45.5	56	75			
Coil rated operating voltage	24...440 V AC according to the coil voltage code (see below table)										
Auxiliary built in contact	1 NO or 1 NC							1 NO + 1 NC			
Contactors compatibility	LAEN● auxiliary contact blocks, LAETSD time delay auxiliary contact (from 25 A contactor) LAERC● RC switch suppressor (up to 95 A), LAEM● mechanical interlock LAEP● set of power connections (up to 95 A)										
Reference	LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38	LC1E40	LC1E50	LC1E65	

3



Size	4 ④		5 ⑤		6 ⑥		7 ⑦		8 ⑧		9 ⑨
Rated operational current AC-3 (A) (1)	80	95	120	160	200	250	300	400	500	630	
Rated operational current AC-1 (A) (2)	110	120	150	200	250	300	320	500	700	1000	
Rated operational power in AC-3 (kW)	220/230 V	22	25	37	45	55	75	90	110	147	185
	380/400 V	37	45	55	75	90	132	160	200	250	335
	415/440 V	45	45	59	80	100	140	160/185	220/250	280/295	375/400
	500 V	45	55	75	90	110	160	200	257	355	400
660/690 V	45	45	80	100	110	160	220	280	335	450	
Width (mm)	85		120		168.5		213		233		309
Coil rated operating voltage	24...440 V AC according to the coil voltage code (see below table)										
Auxiliary built in contact	1 NO + 1 NC				-						
Contactors compatibility	LAEN● auxiliary contact blocks, LAETSD time delay auxiliary contact (from 25 A contactor) LAERC● RC switch suppressor (up to 95 A), LAEM● mechanical interlock LAEP● set of power connections (up to 95 A)										
Reference	LC1E80	LC1E95	LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E360	

(1) Class AC-3: squirrel-cage motors with breaking taking place with the motor running.

(2) Class AC-1: AC loads with $\cos \varphi$ at least equal to 0.95 (resistive load, heating, distribution, etc.).

EasyPact TVS 3-pole contactors from 6 to 630 A - Power characteristics

EasyPact TVS 3-pole contactors - Power circuit connections

Number of poles		3									
Rated operational current (Ie) (Ue ≤ 440V)	In AC-3 (θ ≤ 55 °C) (A)	6	9	12	18	25	32	38	40	50	65
	In AC-3 (θ ≤ 55 °C) (A)	–									
	In AC-1 (θ ≤ 55 °C) (A)	20	25	25	32	36	50	50	60	70	80
	In AC-1 (θ ≤ 40 °C) (A)	–									
Rated operational voltage (Ue) (V)		690									
Frequency limits of the operational current (Hz)		50 or 60									
Conventional thermal current (Ith)	θ ≤ 55 °C (A)	20	25	25	32	36	50	50	60	70	80
	θ ≤ 40 °C (A)	–									
Rated breaking capacity at 440 V Conforming to IEC 60947 (A)		48	72	96	144	200	256	304	320	400	520
Rated making capacity at 440 V Conforming to IEC 60947-4-1 (A)		60	90	120	180	250	320	380	400	500	650
Permissible short time rating, No current flowing for preceding 15 minutes with θ ≤ 40 °C	10 s	80	105	105	145	240	260	310	320	400	520
	1 min	45	61	61	84	120	138	150	165	208	260
	10 min	20	30	30	40	50	60	60	72	84	110
Maximum permissible current, No current flowing for previous 60 minutes, at q ≤ 40 °C - For 10 s		–									
Protection by fuses against short-circuits (U ≤ 690 V)	Without thermal overload relay gG fuse, Type 1	12	20	25	35	40	63	63	80	100	125
	With thermal overload relay	For corresponding aM or gG fuse ratings corresponding to the associated LRE thermal overload relay, please see EasyPact TVS thermal overload relays									
Average impedance per pole	At Ith and 50 Hz (mΩ)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.5	1.5	1
Power dissipation per pole for the above operational currents	AC-3 (W)	0.09	0.20	0.36	0.81	1.6	2.0	2.9	2.4	3.8	4.2
	AC-1 (W)	1.0	1.6	1.6	2.6	3.2	5.0	5.0	5.4	7.4	6.4
Electrical durability	AC-3 (Ue ≤ 440 V) (W)	1.4	1.4	1.4	1.2	1.2	1	0.9	0.9	0.9	0.9
	AC-1 (Ue ≤ 440 V) (W)	0.15	0.15	0.3	0.3	0.3	0.35	0.35	0.35	0.35	0.35
Mechanical durability		10	10	10	10	10	8	8	5	5	5
Connection maximum c.s.a.											
Flexible cable with cable end	1 conductor (mm ²)	1...4	1...4	1...4	1...4	1...6	1...6	1...6	2.5...25	2.5...25	2.5...25
	2 conductors (mm ²)	1...2.5	1...2.5	1...2.5	1...2.5	1...4	1...4	1...4	2.5...10	2.5...10	2.5...10
Flexible cable without cable	1 conductor (mm ²)	1...4	1...4	1...4	1.5...6	1.5...6	1.5...10	1.5...10	2.5...25	2.5...25	2.5...25
	2 conductors (mm ²)	1...4	1...4	1...4	1.5...6	1.5...6	1.5...6	1.5...6	2.5...16	2.5...16	2.5...16
Solid cable without cable end	1 conductor (mm ²)	1...4	1...4	1...4	1.5...6	1.5...6	1.5...10	1.5...10	2.5...25	2.5...25	2.5...25
	2 conductors (mm ²)	1...4	1...4	1...4	1.5...6	1.5...6	1.5...6	1.5...6	2.5...16	2.5...16	2.5...16
Cable with lug (mm)		–									
Bar	Number of bars	–									
	Bar (mm x mm)	–									
Bolt diameter - 1 conductor (mm)		–									
Tightening torque	Power circuit connection (N.m)	1.2	1.2	1.2	1.2	1.5	2.1	2.1	5	5	5
Tool		Philips N°2 or Ø6mm flat							Ø8mm flat		
Reference (Contactor type)		LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38	LC1E40	LC1E50	LC1E65

EasyPact TVS 3-pole contactors from 6 to 630 A - Power characteristics

EasyPact TVS 3-pole contactors - Power circuit connections												
Number of poles		3										
Rated operational current (Ie) (Ue ≤ 440V)	In AC-3 (θ ≤ 55 °C) (A)	80	95	–								
	In AC-3 (θ ≤ 55 °C) (A)	–		120	160	200	250	300	400	500	630	
	In AC-1 (θ ≤ 55 °C) (A)	110	120	–								
	In AC-1 (θ ≤ 40 °C) (A)	–		150	200	250	300	320	500	700	1000	
Rated operational voltage (Ue) (V)		690										
Frequency limits of the operational current (Hz)		50 or 60								50/60		
Conventional thermal current (Ith)	θ ≤ 55 °C (A)	110	120	–								
	θ ≤ 40 °C (A)	–		150	200	250	300	320	500	700	1000	
Rated breaking capacity at 440 V Conforming to IEC 60947 (A)		640	760	960	1280	1600	2000	2400	3200	4000	5040	
Rated making capacity at 440 V Conforming to IEC 60947-4-1 (A)		800	950	1200	1600	2000	2500	3000	4000	5000	6300	
Permissible short time rating, No current flowing for preceding 15 minutes with θ ≤ 40 °C	10 s	640	800	950	1200	1500	1800	2650	3600	4200	5050	
	1 min	320	400	550	580	740	850	1300	1700	2400	3400	
	10 min	135	250		400		440	750	1000	1200	1600	
Maximum permissive current, No current flowing for previous 60 minutes, at q ≤ 40 °C - For 10 s		–		1100	1400	1500	1800	2200	3600	4200	5050	
Protection by fuses against short-circuits (U ≤ 690 V)	Without thermal overload relay gG fuse, Type 1	160	250		315	315	315	500	630	800	800	
	With thermal overload relay	–										
Average impedance per pole	At Ith and 50 Hz (mΩ)	0.8	0.8	0.6	0.6	0.33	0.32	0.3	0.26	0.18	0.12	
Power dissipation per pole for the above operational currents	AC-3 (W)	5.1	7.2	8.6	15	13	20	27	42	45	48	
	AC-1 (W)	9.7	12	14	24	21	29	31	65	88	120	
Electrical durability	AC-3 (Ue ≤ 440 V) (W)	–		0.8	0.8	0.5	0.7	0.5	0.6	0.6	0.6	
	AC-1 (Ue ≤ 440 V) (W)	–		0.25	0.25	0.2	0.2	0.4	0.25	0.25	0.2	
Mechanical durability		3	3	4	4	5	5	5	4	4	4	
Connection maximum c.s.a.												
Flexible cable with cable end	1 conductor (mm ²)	4...50		10...120			–					
	2 conductors (mm ²)	4...16		10...120 + 10...50			–					
Flexible cable without cable	1 conductor (mm ²)	4...50		10...120			–					
	2 conductors (mm ²)	4...25		10...120 + 10...50			–					
Solid cable without cable end	1 conductor (mm ²)	4...50		10...120			–					
	2 conductors (mm ²)	4...25		10...120 + 10...50			–					
Cable with lug (mm)		–					150	185	240	2 x 150	2 x 240	–
Bar	Number of bars	–					2					
	Bar (mm x mm)	–					3 x 25	4 x 32	5 x 30	30 x 5	40 x 5	60 x 5
Bolt diameter - 1 conductor (mm)		–					M8	M10	M10	M10	M10	M12
Tightening torque	Power circuit connection (N.m)	–		12	12	18	35	35	35	35	58	
Tool		Ø8mm flat or Allen key n°4		Allen key n°4		Wrench						
Reference (Contactor type)		LC1E80	LC1E95	LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E630	

EasyPact TVS thermal overload relays



EasyPact TVS thermal overload relays - Compatible with Contactor (size 1 & 2)

Reference	Possible I _{max} Calibration	Compatible with Contactor (size 1 & 2) Com. Ref.						
		LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38
LRE01	0.10...0.16 A	■	■	■	■	■	■	■
LRE02	0.16...0.25 A	■	■	■	■	■	■	■
LRE03	0.25...0.40 A	■	■	■	■	■	■	■
LRE04	0.40...0.63 A	■	■	■	■	■	■	■
LRE05	0.63...1 A	■	■	■	■	■	■	■
LRE06	1...1.6 A	■	■	■	■	■	■	■
LRE07	1.6...2.5 A	■	■	■	■	■	■	■
LRE08	2.5...4 A	■	■	■	■	■	■	■
LRE10	4...6 A	■	■	■	■	■	■	■
LRE12	5.5...8 A		■	■	■	■	■	■
LRE14	7...10 A		■	■	■	■	■	■
LRE16	9...13 A			■	■	■	■	■
LRE21	12...18 A				■	■	■	■
LRE22	16...24 A					■	■	■
LRE32	23...32 A					■	■	■
LRE35	30...38 A							■

3



EasyPact TVS thermal overload relays - Compatible with Contactor (size 3 & 4)

Reference	Possible I _{max} Calibration	Compatible with Contactor (size 3 & 4) Com. Ref.				
		LC1E40	LC1E50	LC1E65	LC1E80	LC1E95
LRE322	17...25 A	■	■	■	■	■
LRE353	23...32 A	■	■	■	■	■
LRE355	30...40 A	■	■	■	■	■
LRE357	37...50 A		■	■	■	■
LRE359	48...65 A			■	■	■
LRE361	55...70 A				■	■
LRE363	63...80 A				■	■
LRE365	80...104 A					■



EasyPact TVS thermal overload relays - Compatible with Contactor (size 5, 6, 7, 8 and 9)

Reference	Possible I _{max} Calibration	Compatible with Contactor (size 5, 6, 7, 8, and 9) Com. Ref.							
		LC1E120	LC1E160	LC1E200	LC1E250	LC1E300	LC1E400	LC1E500	LC1E630
LRE480	51...81A	■	■	□	□	□	□	□	□
LRE481	62...99A	■	■	□	□	□	□	□	□
LRE482	84...135A	■	■	□	□	□	□	□	□
LRE483	124...198A		□	■	□	□	□	□	□
LRE484	146...234A			□	■	■	■	□	□
LRE485	174...279A			□	■	■	■	□	□
LRE486	208...333A				■	■	■	□	□
LRE487	259...414A					■	■	□	□
LRE488	321...513A						□	■	□
LRE489	394...630A							□	■

Note:

- Means the relay can match with contactor both in electrical and mechanical.
- Means the relay can match with contactor only in electrical (can not directly mounting).

Common characteristics

- > Class: 10 A.
- > Operating voltage: max. 690 V AC.

EasyPact TVS thermal overload relays

EasyPact TVS 3-pole contactors										
Size	1		2		3		4			
Power circuit characteristics										
Tripping class (V)	Conforming to IEC 60947-4-1		10 A							
Rated insulation voltage	Conforming to IEC 60947-4-1		690							
Rated impulse withstand voltage (Uimp) (kV)	6									
Frequency limits	Of the operating current (Hz)		50...60							
Setting range (A)	Depending on model		0.1...18	16...38	17...104	51...630				
Power circuit connections										
Connection by screw clamp terminals	Flexible cable without cable end 1 conductor (mm ²)	1.5...6	2.5...10	4...35	-					
	Flexible cable with cable end 1 conductor (mm ²)	1...4	1.5...6	4...35	-					
	Solid cable without cable end 1 conductor (mm ²)	1...6	2.5...10	4...35	-					
	Tightening torque (N.m)	1.7	2.5	9	-					
Connection by bars or lugs	Pitch without spreaders (mm)	-			34.8	40	48	48	55	80
	Bars or cables with lugs Cross section (mm)	-			3x18	3x20	3x25	4x25	5x30	6x40
	Screws type	-			M8	M8	M10	M10	M10	M12
	Screws tightening torque (N.m)	-			27.5	27.5	35	35	35	58
Auxiliary contact characteristics										
Conventional thermal current (A)	5									
Max. sealed consumption of the operating coils of controlled contactors (Occasional operating cycles of contact 95-96) a.c. supply		(V)	110	120	220	240	380	480	500	600
		(A)	3.27	3	1.63	1.5	0.95	0.75	0.72	0.72
Protection against shortcircuits - By gG, maximum rating or by GB2 (A)	5									
Connection by screw clamp terminals	Flexible cable without cable end 1 conductor (mm ²)	2 x 1...2.5								
	Flexible cable with cable end 1 conductor (mm ²)	2 x 1...2.5								
	Solid cable without cable end 1 conductor (mm ²)	2 x 1...2.5								
	Tightening torque (N.m)	1.7								
Environment										
Conforming to standard	IEC 60947-4-1, IEC 60947-5-1									
Product certifications	EAC									
Degree of protection	Conforming to IEC 60529	IP2X				IP00				
Protective treatment	Conforming to IEC 60068	"TH"								
Ambient air temperature (°C)	Storage	-60...+80								
	Normal operation without derating (IEC 60947-4-1)	-20...+60								
	Minimum/maximum operating temperature (with derating)	-20...+70								
Operating positions without derating	In relation to normal vertical mounting plane	Any position								
Flame resistance (°C)	Conforming to IEC 60068-2-1	850								
Shock resistance	Permissive acceleration conforming to IEC 60068-2-7	6 gn - 11 ms								
Vibration resistance	Permissive acceleration conforming to IEC 60068-2-6	3 gn								
Dielectric strenght at 50 Hz (kV)	Conforming to IEC 60255-5	6								
Surge withstand (kV)	Conforming to IEC 60801-5	6								
Operating characteristics										
Temperature compensation (°C)	- 20...+60									
Tripping threshold (A)	Conforming to IEC 60947-4-1	1.14 ± 0.06 I _r								
Sensitivity to phase failure	Conforming to IEC 60947-4-1	Tripping current 130 % of I _r on two phase, the last one at 0								
Reference		LRE 01...21	LRE 22...35	LRE 322...365	LRE 480...482	LRE 483	LRE 484	LRE 485...487	LRE 488	LRE 489

EasyPact TVS thermal overload relays



EasyPact TVS thermal overload relays - 3-pole thermal overload relays

Differential thermal overload relays for use with fuses or magnetic circuit-breakers GV2 L and GV3 L

- Compensated relays with manual or automatic reset,
- with relay trip indicator,
- for a.c.

Class 10 A for connection by screw clamp terminals

Relay setting range (A)		0.10...0.16	0.16...0.25	0.25...0.40	0.40...0.63	0.63...1	1...1.6	1.6...2.5	2.5...4	4...6
Fuses to be used with selected relay	aM (A)	0.25	0.5	1	1	2	2	4	6	8
	gG (A)	2	2	2	2	4	4	6	10	16
For use with contactor LC1		E06...E38	E06...E3	E06...E3	E06...E3	E06...E3	E06...E3	E06...E3	E06...E3	E06...E3
Reference		LRE01	LRE02	LRE03	LRE04	LRE05	LRE06	LRE07	LRE08	LRE10

Relay setting range (A)		5.5...8	7...10	9...13	12...18	16...24	23...32	30...38	17...25	23...32
Fuses to be used with selected relay	aM (A)	12	12	16	20	25	40	40	25	40
	gG (A)	20	20	25	35	50	63	80	50	63
For use with contactor LC1		E09...E38	E09...E38	E12...E38	E18...E38	E25...E38	E25...E38	E38	E40...E95	E40...E95
Reference		LRE12	LRE14	LRE16	LRE21	LRE22	LRE32	LRE35	LRE322	LRE353

Relay setting range (A)		30...40	37...50	48...65	55...70	63...80	80...104			
Fuses to be used with selected relay	aM (A)	40	63	63	80	80	80			
	gG (A)	100	100	100	125	125	160			
For use with contactor LC1		E40...E95	E50...E95	E65...E95	E80...E95	E80...E95	E95			
Reference		LRE355	LRE357	LRE359	LRE361	LRE363	LRE365			

Class 10 A directly connected by connector

Relay setting range (A)		51...81	62...99	84...135	124...198	146...234	174...279	208...333		
Fuses to be used with selected relay	aM (A)	100	125	160	200	250	315	400		
	gG (A)	125	160	200	250	315	315	400		
For use with contactor LC1		E120...E160			E200	E250...E400				
Reference		LRE480	LRE481	LRE482	LRE483	LRE484	LRE485	LRE486		

Relay setting range (A)		259...414	321...513	394...630						
Fuses to be used with selected relay	aM (A)	400	500	630						
	gG (A)	500	800	1000						
For use with contactor LC1		E300...E400	E500	E630						
Reference		LRE487	LRE488	LRE489						

3

Protection components - Thermal-magnetic motor circuit-breakers

GZ1 E



Motor circuit-breakers - Pushbutton control

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3	230 V	kW	–	–	–	–	–	–	0.37	0.75	1.1
	400 V	kW	–	–	–	–	–	0.37	0.75	1.5	2.2
	440 V	kW	–	–	–	–	–	0.55	1.1	1.5	3
	500 V	kW	–	–	–	–	0.37	0.75	1.1	2.2	3.7
	690 V	kW	–	–	–	0.37	0.55	1.1	1.5	3	4
Setting range of thermal trips (A)			0.1...0.16	0.16...0.25	0.25...0.40	0.40...0.63	0.63...1	1...1.6	1.6...2.5	2.5...4	4...6.3
Magnetic tripping current $I_d \pm 20\%$ (A)			1.5	2.4	5	8	13	22.5	33.5	51	78
Reference			GZ1 E01	GZ1 E02	GZ1 E03	GZ1 E04	GZ1 E05	GZ1 E06	GZ1 E07	GZ1 E08	GZ1 E10

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3	230 V	kW	2.2	–	4	5.5	5.5	7.5
	400 V	kW	4	5.5	7.5	9	11	15
	440 V	kW	4	5.5	9	11	11	15
	500 V	kW	5.5	9	10	11	15	18.5
	690 V	kW	7.5	11	15	18.5	22	22
Setting range of thermal trips (A)			6...10	9...14	13...18	17...23	20...25	24...32
Magnetic tripping current $I_d \pm 20\%$ (A)			138	170	223	327	327	416
Reference			GZ1 E14	GZ1 E16	GZ1 E20	GZ1 E21	GZ1 E22	GZ1 E32

3

Thermal-magnetic motor circuit-breakers GZ1 E

Environment			
Conforming to standards		IEC 60947-2, IEC 60947-4	
Protective treatment	Conforming to IEC 60068-2-30	IEC60068-2-30 Test Db, Variant 2	
Degree of protection		In GV2 MC01 enclosure: IP 41, In GV2 MC02 enclosure: IP 55	
Ambient air temperature	Storage (°C)	- 40...+ 80	
	Operation (°C)	- 20...+ 60	
Flame resistance	Conforming to IEC 60695-2-1 (°C)	960	
Maximum operating altitude (m)		2000	
Cabling Number of conductors and c.s.a.		Min.	Max.
	Solid cable	2 x 1	2 x 6
	Flexible cable without cable end (mm ²)	2 x 1.5	2 x 6
	Flexible cable with cable end (mm ²)	2 x 1	2 x 4
Suitable for isolation	Conforming to IEC 60947-1 § 7-1-6	Yes	
Tightening torque (N.m)		1.7	
Rated operational voltage (U _e)	Conforming to IEC 60947-2 (V)	690	
Rated insulation voltage (U _i)	Conforming to IEC 60947-2 (V)	690	
Rated operational frequency	Conforming to IEC 60947-2 (Hz)	50/60	
Rated impulse withstand voltage (U _{imp})	Conforming to IEC 60947-2	6	
Total power dissipated per pole (W)		2.5	
Mechanical durability (C.O.: closing, opening) (C.O.)		100 000	
Electrical durability	For AC-3 duty (C.O.)	100 000	
Duty class (maximum operating rate)	(C.O./h)	25	
Reference - Circuit-breaker type		GZ1 E	

Breaking capacity			0.1 to 1.6	2.5	4	6.3	10	14	18	23	25 to 32	
Breaking capacity	230/240 V	I _{cu} kA	■	■	■	■	■	■	■	30	30	
		I _{cs} % (1)	■	■	■	■	■	■	■	100	100	
	400/415 V	I _{cu} kA	■	■	■	■	■	10	10	10	10	
		I _{cs} % (1)	■	■	■	■	■	50	50	40	40	
	440 V	I _{cu} kA	■	■	■	30	10	6	6	5	5	
		I _{cs} % (1)	■	■	■	100	100	50	50	50	50	
	500 V	I _{cu} kA	■	■	■	30	8	5	5	3	3	
		I _{cs} % (1)	■	■	■	100	100	75	75	75	75	
	690 V	I _{cu} kA	■	2	2	2	2	2	2	2	2	
		I _{cs} % (1)	■	75	75	75	75	75	75	75	75	
	Circuit-breaker type GZ1 E			01 to 06	07	08	10	14	16	20	21	22 to 32

■ > 100 kA

(1) As % of I_{cu}.

EasyPact TVS contactors - Accessories for LC1E contactor



3-pole accessories for LC1E contactor - Accessories for motor reverse assembly

Using 2 identical contactors		LC1E06... E12	LC1E18/ E25	LC1E32/ E38	LC1E40... E65	LC1E80/ E95	LC1E120/ E160	LC1E200/ E250	LC1E300	LC1E400	LC1E500	LC1E630
Reference	Set of power connections ①	LAEP1	LAEP12	LAEP2	LAEP3	LAEP4	DIY (Do it yourself)	DIY (Do it yourself)	DIY (Do it yourself)	DIY (Do it yourself)	DIY (Do it yourself)	DIY (Do it yourself)
	Mechanical interlock ②	LAEM1	LAEM1	LAEM1	LAEM1	LAEM4	LAEM5	LAEM6	LAEM7	LAEM7	LAEM7	LAEM8



③ RC surge suppressor

Mounting	Screw mounting			
For use with contactor	Rating	LC1E06...E95		
	Type	24...48 V~	50...127 V~	110...240 V~
Reference	LAERCE	LAERCG	LAERCU	LAERCN

- Effective protection for circuits highly sensitive to "high frequency" interference and transient generated when the contactor coil is switched off. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5 % total harmonic distortion.
- Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max.
- Slight increase in drop-out time (1.2 to 2 times the normal time).

EasyPact TVS contactors - Accessories for LC1E contactor



Instantaneous auxiliary contact blocks for connection by screw lamps terminals (For use in normal operating environment)

Clip-on mounting	Front			
Number of contacts per block	1 NO / 1 NC	2 NO	2 NC	2 NO / 2 NC
Reference ①	LAEN11	LAEN20	LAEN02	LAEN22

Time delay auxiliary contact blocks for connection by screw clamp terminals 8 A - 690 V

Clip-on mounting	Front
Number of contacts per block	1 NO / 1 NC
Time delay type	On-delay
Setting range	1...30 s
Reference ②	LAETSD (For use only LC1E25 to LC1E630)

Instantaneous and time delay contact characteristics

Contact block type	LAEN11, 20, 02, 22			LAETSD					
Number of contacts	2 or 4			2					
Rated operational voltage (Ue)	Up to (V)			690					
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1 (V)			690					
Conventional thermal current (Ith)	For ambient temperature $\theta \leq 60$ °C (A)			10					
Minimum switching capacity	U min (V)			17					
	I min (mA)			5					
Short-circuit protection	Conforming to IEC 60947-5-1 (A)			10					
Rated making capacity	Conforming to IEC 60947-5-1 (Irms)			~ 140					
Short-time rating	Permissible for 1 s (A)			100					
	Permissible for 500 ms (A)			120					
	Permissible for 100 ms (A)			140					
Insulation resistance	mΩ			> 10					
Non-overlap time	Guaranteed between NC and NO contacts (ms)			1.5 (on energisation and on de-energisation)					
Overlap time	Guaranteed between LAE N22 NC and NO contacts (ms)			-					
Time delay	Ambient air temperature for operation (°C)			-20...+70					
	Repeat accuracy (°C)			±2 %					
	Drift up to 0.5 million operating cycles (°C)			+15 %					
	Drift depending on ambient air temperature (°C)			0.25 % per °C					
Mechanical durability	In millions of operating cycles			10					
Rated operational power of contacts (Conforming to IEC 60947-5-1)	a.c. supply categories AC14/15 (V)			24	48	115	230	400	440
	1 million operating cycles (VA)			60	120	280	560	960	1050
	3 million operating cycles (VA)			16	32	80	160	280	300
	10 million operating cycles (VA)			4	8	20	4	70	80

Environment

Conforming to standard	IEC 60947-5-1	
Product certifications	EAC	
Protective treatment	Conforming to IEC 60068	"TH"
Degree of protection	Conforming to IEC 60529	IP2X
Ambiant air temperature	Storage (°C)	-60...+80
	Operation (°C)	-5...+55
	Permissible for operation at Uc (°C)	-20...+70
Maximum operating altitude	Without derating (m)	3000
Connection by cable	Philips N° 2 and Ø 6 mm. Flexible or solid cable with or without cable end (mm²)	Min: 1 x 1 Max: 2 x 2.5
Tightening torque	(N.m)	1.2



04. Easy Altivar variable speed drives

Easy Altivar 610 - IP 20 drives (Power range from 0.75 kW to 160 kW)



Three-phase supply voltage: 380...415 V 50/60 Hz, with integrated category C3 EMC filter

ND: Normal duty (2), HD: Heavy duty (3)			kW	HP	kW	HP	kW	HP	kW	HP	kW	HP
Motor (1)	Power indicated on rating plate	ND	0.75	0.37	1.5	0.75	2.2	1.5	3	2.2	4	3
		HD	1	0.5	2	1	3	2	4	3	5	–
Easy Altivar 610	Max. continuous output current (1)		2.2	1.5	4.0	2.2	5.6	4.0	7.2	5.6	9.3	7.2
Dimensions: W x H x D (mm)	EMC plate not mounted (mm)		145 x 297 x 203 ①									
Reference			ATV610U07N4		ATV610U15N4		ATV610U22N4		ATV610U30N4		ATV610U40N4	

ND: Normal duty (2), HD: Heavy duty (3)			kW	HP	kW	HP	kW	HP	kW	HP	kW	HP		
Motor (1)	Power indicated on rating plate	ND	5.5	4	7.5	5.5	11	7.5	15	11	18.5	15		
		HD	7.5	5	10	7.5	15	10	20	15	25	20		
Easy Altivar 610	Max. continuous output current (1)		12.7	9.3	15.8	12.7	23.5	16.5	31.7	23.5	39.2	31.7		
Dimensions: W x H x D (mm)	EMC plate not mounted (mm)		145 x 297 x 203 ①				171 x 360 x 233 ②				211 x 495 x 232 ③			
Reference			ATV610U55N4		ATV610U75N4		ATV610D11N4		ATV610D15N4		ATV610D18N4			

ND: Normal duty (2), HD: Heavy duty (3)			kW	HP	kW	HP	kW	HP	kW	HP	kW	HP		
Motor (1)	Power indicated on rating plate	ND	22	18.5	30	22	37	30	45	37	55	45		
		HD	30	25	40	30	50	40	60	50	75	60		
Easy Altivar 610	Max. continuous output current (1)		46.3	39.2	61.5	46.3	74.5	59.6	88	74.5	106	88		
Dimensions: W x H x D (mm)	EMC plate not mounted (mm)		211 x 495 x 232 ③			226 x 613 x 271 ④			290 x 762 x 323 ⑤					
Reference			ATV610D22N4		ATV610D30N4		ATV610D37N4		ATV610D45N4		ATV610D55N4			

ND: Normal duty (2), HD: Heavy duty (3)			kW	HP	kW	HP	kW	HP	kW	HP	kW	HP
Motor (1)	Power indicated on rating plate	ND	75	55	90	75	110	90	132	110	160	132
		HD	100	75	125	100	149	125	178	149	216	178
Easy Altivar 610	Max. continuous output current (1)		145	106	173	145	211	173	250	211	302	250
Dimensions: W x H x D (mm)	EMC plate not mounted (mm)		290 x 762 x 323 ⑤				320 x 852 x 390 ⑥					
Reference			ATV610D75N4		ATV610D90N4		ATV610C11N4		ATV610C13N4		ATV610C16N4	

- (1) These values are given for a nominal switching frequency of 4 kHz up to ATV610D45N4, or 2.5 kHz for ATV610D55N4...C16N4 for use in continuous operation. The switching frequency is adjustable from 2...12 kHz up to ATV610D45N4, or from 1...8 kHz for ATV610D55N4...C16N4. Above 2.5 or 4 kHz (depending on the rating), the drive will automatically reduce the switching frequency in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see the derating curves on our website).
- (2) Values given for applications requiring a slight overload (up to 110 % for 60 s or 120% for 20 s).
- (3) Values given for applications requiring a slight overload (up to 150 % for 60 s).
- (4) With IP21 conformity kit.

Easy Altivar 610 - Accessories for mounting of variable speed drives



Kit for IP 21 conformity		
For use with variable speed drives		ATV610C11N4... C16N4
Power	kW	110...160
	HP	149...216
Reference		VW3A9704

Easy Altivar 610 - Configuration and runtime tools, Communication buses and networks



Plain text display terminal

Degree of protection	IP21
Display type	Backlit LCD screen white
Pixel resolution	128 x 64
Reference	VW3A1113



Remote mounting kit

Type of product	Remote mounting kit for plain text display terminal 1	Tightening tool for remote mounting kit 2	Remote mounting cordset (equipped with 2 RJ45 connectors) 3			
Degree of protection	IP20	–	–	–	–	–
Length (m)	–	–	1	3	5	10
Connector type	–	–	RJ45			
Reference	VW3A1114	ZB5AZ905	VW3A1104R10	VW3A1104R30	VW3A1104R50	VW3A1104R100



I/O modules (option)

I/O type	Digital inputs	6	–
	Digital outputs	2	–
	Analog inputs	2 (1)	–
	Relay outputs	–	3 (2)
Reference		VW3A3203	VW3A3204



PROFIBUS DP V1 optional communication module

Electrical connection	1 female connector SUB-D 9
Transmission rate	9.6 kbps...12 Mbps
Display type	1 LED for RUN, 1 LED for bus fault
Bus profile	PROFIdrive, CiA 402
Reference	VW3A3607

(1) Differential analog inputs configurable via software as current (0-20 mA/4-20 mA) or probe (PTC, PT100, or 2-wire or 3-wire PT1000) inputs. When configured as PTC probe inputs, they must never be used to protect an ATEX motor in applications in explosive atmospheres. Please refer to the ATEX guide on our website.
(2) NO contacts.

Easy Altivar 310 - IP 20 drives (380...460 V 50/60 Hz)



Three-phase supply voltage: 380...460 V 50/60 Hz, without EMC filter

Motor	Power indicated on rating plate (1)	kW	0.37	0.75	1.5	22	3
		HP	0.5	1	2	3	4
Easy Altivar 310	Max. continuous output current (1)		1.5	2.3	4.1	5.5	7.1
Dimensions: W x H x D (mm)			72 x 143 x 130 ①	72 x 143 x 140 ①	105 x 143 x 151 ②		140 x 184 x 151 ③
Reference			ATV310H037N4E	ATV310H075N4E	ATV310HU15N4E	ATV310HU22N4E	ATV310HU30N4E

Motor	Power indicated on rating plate	kW	4	5.5	7.5	11	
		HP	5	7.5	10	15	
Easy Altivar 310	Max. continuous output current		9.5	12.6	17	24	
Dimensions: W x H x D (mm)			140 x 151 x 184 ④	140 x 184 x 151 ③	150 x 232 x 171 ⑤		
Reference			ATV310HU40N4E	ATV310HU55N4E	ATV310HU75N4E	ATV310HD11N4E	

(1) These values are given for a nominal switching frequency of 4 kHz, for use in continuous operation. If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz and 20% for 12 kHz.



Easy Altivar 310 - Configuration tools



Simple Loader, Multi-Loader configuration tools and associated cable

Description	Simple Loader tool ⑥ For duplicating one drive configuration on another drive. The drives must be powered-up.	Multi-Loader tool ⑦ For copying a configuration on a PC or drive and duplicating it on another drive. The drives do not need to be powered-up.	Cordset for Multi-Loader tool ⑧ For connecting the Multi-Loader tool to the Easy Altivar 310 drive in its packaging.
Kit composition	Simple loader tool 1 cordset with 2 connectors RJ45	Multi loader tool 1 adaptor RJ45 female/female 4 batteries AA/LR6 1.5 V 1 cordset with 2 connectors RJ45 1 memory card SD 2 Go 1 cordset with 1 connector USB type A and 1 connector USB type mini B	Equipped with a non-locking RJ45 connector with special mechanical catch on the drive end and an RJ45 connector on the Multi-Loader end.
For use with	ATV310H●●●N4E	ATV310H●●●N4E	ATV310H●●●N4E in its packaging
Reference	VW3A8120	VW3A8121	VW3A8126

Remote display terminals and associated cordsets

Description	Remote display terminals ⑨ For fixing the Human-Machine interface on an enclosure door with IP 54 or IP 65 degree of protection. A remote-fixing cordset VW3A1104R●● is also required.		Remote-fixing cordsets ⑩ Equipped with 2 RJ45 connectors. For connecting the VW3 A1006 or VW3A1007 remote display terminal to the Easy Altivar 310 drive.	
For use with	ATV310H●●●N4E	ATV310H●●●N4E	ATV310H●●●N4E	ATV310H●●●N4E
Degree of protection	IP 54	IP 65	-	
Dimensions: W x H x D (mm)	50 x 70 x 22.7	66 x 106 x 26.7	Length: 1 m/3.28 ft	Length: 3 m/9.84 ft
Reference	VW3A1006	VW3A1007	VW3A1104R10	VW3A1104R30

Easy Altivar 310 - line chokes, motor chokes and LR filter cells



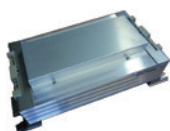
Line chokes

For use with		ATV310H037N4E	ATV310H075N4E	ATV310HU15N4E	ATV310HU22N4E	ATV310HU30N4E
Line current with choke	380 V	1.1	1.9	3.5	5.1	6.6
	460 V	1	1.7	2.9	4.4	5.6
Line current without choke	380 V	2.1	3.5	6.5	8.8	11.1
	460 V	1.8	3.1	5.4	7.2	9.2
Dimensions: W x H x D (mm)		100 x 135 x 60		130 x 155 x 90		
Reference		VW3A4551		VW3A4552		

For use with		ATV310HU40N4E	ATV310HU55N4E	ATV310HU75N4E	ATV310HD11N4E
Line current with choke	380 V	8.5	11.6	15.2	22
	460 V	7.1	9.9	12.8	18.9
Line current without choke	380 V	13.7	21.3	26.6	36.1
	460 V	11.4	14.3	22.4	30.4
Dimensions: W x H x D (mm)		130 x 155 x 90		155 x 170 x 135	
Reference		VW3A4553		VW3A4554	

Motor chokes

For use with		ATV310HU22N4E ...HU40N4E	ATV310HU55N4E	ATV310HU75N4E ...HD11N4E
Losses (W)		65	75	90
Nominal current (A)		10	16	30
Dimensions: W x H x D (mm)		130 x 155 x 90		155 x 170 x 135
Reference		VW3A4552	VW3A4553	VW3A4554



LR filter cell

For use with		ATV310H037N4E...HU15N4E
Losses (W)		150
Nominal current (A)		10
Dimensions: W x H x D (mm)		169.5 x 340 x 123
Reference		VW3A58451

Easy Altivar 310 - Braking resistors



Braking resistors				
Not protected resistor (IP00) (1)				
For use with	ATV310HU15N4E	ATV310HU22N4E	ATV310HU30N4E	ATV310HU40N4E
Minimum Ohmic value (Ω)	80	60	36	36
Ohmic value at 20° C (Ω)	100		100	
Power available at 50° C (kW) (2)	0.028		0.035	
Dimensions: W x H x D (mm)	60 x 170 x 30		62 x 212 x 36	
Reference	VW3A7723 ①		VW3A7725 ①	
Protected resistor (IP20 or 23)				
For use with	ATV310HU15N4E	ATV310HU22N4E	ATV310HU30N4E	ATV310HU40N4E
Minimum Ohmic value (Ω)	80	60	36	36
Ohmic value at 20° C (Ω)	100			
Power available at 50° C (kW) (2)	0.1			
Dimensions: W x H x D (mm)	105 x 295 x 100			
Reference	VW3A7730 ②			
Protected resistor (IP20 or 23)				
For use with	ATV310HU55N4E	ATV310HU75N4E	ATV310HD11N4E	
Minimum Ohmic value (Ω)	28	28	28	
Ohmic value at 20° C (Ω)	60		28	
Power available at 50° C (kW) (2)	0.16		0.3	
Dimensions: W x H x D (mm)	105 x 345 x 100		175 x 345 x 100	
Reference	VW3A7731 ②		VW3A7732 ③	

(1) For not protected resistors, add a thermal overload device

(2) Load factor for resistors: the value of the average power that can be dissipated at 50 °C from the resistor into the casing is determined for a load factor during braking that corresponds to the majority of normal applications.

For VW3A7730...732:

- 2 s braking with a 0.6 Tn braking torque for a 40 s cycle

- 0.8 s braking with a 1.5 Tn braking torque for a 40 s cycle



Easy Altivar 310 - Modbus serial link



Modbus serial link

Connection via splitter box and RJ45 connectors

Description	Modbus splitter box ¹ 10 RJ45 connectors and 1 screw terminal	Cordsets for Modbus serial link ² equipped with 2 RJ45 connectors		
Length (m)	–	0.3	1	3
Reference	LU9GC3	VW3A8306R03	VW3A8306R10	VW3A8306R30



Description	Modbus T-junction boxes ³ (with integrated cable)		Line terminators (1) (2) ⁴ For RJ45 connector	
Length (m)	0.3	1	–	–
Reference	VW3A8306TF03	VW3A8306TF10	VW3A8306RC	VW3A8306R

(1) Depends on the bus architecture
(2) Order in multiples of 2

Easy Altivar 310 - Motor starters



Motor starters - Three-phase supply voltage, 380...460 V 50/60 Hz (1)						
Standard power ratings	kW	0.37	0.75	1.5	2.2	3
	HP	0.5	1	2	3	4
Variable speed drive		ATV310H037N4E	ATV310H075N4E	ATV310HU15N4E	ATV310HU22N4E	ATV310HU30N4E
Combination with control circuit	TeSys motor circuit-breaker (2)	GV2P07 GV2L07	GV2P08 GV2L08	GV2P14 GV2L14		GV2P16 GV2L16
	Operating range	2.5	4	10		14
	TeSys contactor (3)	LC1D09				
Standard power ratings	kW	4	5.5	7.5	11	
	HP	5.4	7.4	10	15	
Variable speed drive		ATV310HU40N4E	ATV310HU55N4E	ATV310HU75N4E	ATV310HD11N4E	
Combination with control circuit	TeSys motor circuit-breaker (2)	GV2P16 GV2L16	GV2P22 GV2L22	GV2P32 GV2L32	GV2P40 GV2L40	
	Operating range	14	25	32	40	
	TeSys contactor (3)	LC1D09		LC1D18	LC1D25	

(1) Motor power indicated for combination with an ATV310H●●●N4E drive with the same rating

(2) TeSys motor circuit-breakers:

- GV2 P●●: Thermal magnetic motor circuit-breakers with pushbutton control
- GV2 L●●: Magnetic motor circuit-breakers with control by rotary knob.

(3) For a complete list of references for TeSys contactors, please visit our local website



05. Easy Harmony Electromechanical Relays

Easy Harmony RXM electromechanical relays



Easy Harmony RXM miniature plug-in relays

Type		With LED - Miniature relays without lockable test-button	
Contact		2 CO	4 CO
Thermal current (Ith)		5 A	3 A
Complete product	12 VDC	RXM2LB2JD	RXM4LB2JD
	24 VDC	RXM2LB2BD	RXM4LB2BD
	36 VDC	RXM2LB2CD	RXM4LB2CD
	48 VDC	RXM2LB2ED	RXM4LB2ED
	110 VDC	RXM2LB2FD	RXM4LB2FD
	24 VAC	RXM2LB2B7	RXM4LB2B7
	120 VAC	RXM2LB2F7	RXM4LB2F7
	230 VAC	RXM2LB2P7	RXM4LB2P7

Type		Without LED - Miniature relays without lockable test-button	
Contact		2 CO	4 CO
Thermal current (Ith)		5 A	3 A
Complete product	12 VDC	RXM2LB1JD	RXM4LB1JD
	24 VDC	RXM2LB1BD	RXM4LB1BD
	48 VDC	RXM2LB1ED	RXM4LB1ED
	24 VAC	RXM2LB1B7	RXM4LB1B7
	120 VAC	RXM2LB1F7	RXM4LB1F7
	230 VAC	RXM2LB1P7	RXM4LB1P7



For use with	RXM2	RXM2, RXM4
Screw clamp socket	RXZE1M2C	RXZE1M4C



For use with	RXZE1M●C	RXZE1M2C	RXZE1M4C
Metal maintaining clamp	RXZ410	RXZ420	RXZ430

Note: If protection module needed, please used the RZE2● sockets with the associated protection module RXM0. You can find all the details in the RXM●AB range.



06. Easy Modicon power supplies

Easy Modicon ABL2K power supplies and Accessories



Regulated switch mode power supplies 35 to 350 W ¹

Cooling design	Free Air Convection		
Automatic protect reset	Yes		
Voltage switching	Automatic		
Input Voltagesingle-phase (47~63Hz)	100...240 VAC	100...120 VAC, 200...240 VAC	
Output Voltage	24 VDC		
Power (W)	35	50	100
Output current (A)	1.5	2.2	4.5
Reference	ABL2REM24015K	ABL2REM24020K	ABL2REM24045K

Cooling design	Free Air Convection	Forced air cooling by built-in DC FAN		
Automatic protect reset	Yes			
Voltage switching	Manual			
Input Voltagesingle-phase (47~63Hz)	100...120 VAC, 200...240 VAC			
Output Voltage	24 VDC			
Power (W)	150	200	250	350
Output current (A)	6.5	8.3	10.5	14.6
Reference	ABL2REM24065K	ABL2REM24085K	ABL2REM24100K	ABL2REM24150K



Options for Easy Modicon ABL2K power supplies

Type of mounting accessory	4-corner bracket ²	Clip-on mounting plate ³	L-type accessories ⁴	
Description	For direct mounting on back panel Mounting screws not provided. Recommended use: M4 (6 mm/0.24 in) or M4 (8 mm/0.31 in) screws	For mounting on 35 mm (1.37 in.) DIN rail	Size: Small L	Size: Big L
For power supplies	ABL2REM24085K, ABL2REM24100K, ABL2REM24150K	All models	ABL2REM24015K, ABL2REM24020K, ABL2REM24045K, ABL2REM24065K	ABL2REM24085K, ABL2REM24100K, ABL2REM24150K
Sold in lots of	40	5 (1)	1	1
Reference	ABL2K01	ABL2K02	ABL2K03A	ABL2K03B

(1) ABL2K02 is a pack of 5 accessories usable on 35 mm (1.37 in.) 5 rails. Please note that only 1 accessory is necessary for mounting a 35 to 150 W power supply but 2 accessories are needed for the other three models (200, 250, and 350 W).



07. Easy Lexium Motion Control

Easy Lexium 16D Motion control



Lexium 16D servo drives and BCH16 servo motors combinations - Single-phase supply voltage: 200/230 VAC

Power output (kW)	0.1		0.2	
Nominal speed of rotation (min-1)	3000			
Nominal torque (N.m)	0.32		0.64	
With holding brake	No	Yes	No	Yes
Inertia -without holding brake (kg.cm²)	0.041	0.047	0.42	0.48
Motor inertia type	Low		High	
Dimensions: W x H x D (mm)	52 x 150 x 155.2			
Reference				
Servo drive reference ①	LXM16DU01M2X		LXM16DU02M2X	
Servo motor reference ②	BCH16LB01330A5C	BCH16LB01330F5C	BCH16HD02330A5C	BCH16HD02330F5C

Power output (kW)	0.4		0.75	
Nominal speed of rotation (min-1)	3000			
Nominal torque (N.m)	1.27		2.39	
With holding brake	No	Yes	No	Yes
Inertia -without holding brake (kg.cm²)	0.67	0.73	1.51	1.64
Motor inertia type	High			
Dimensions: W x H x D (mm)	52 x 150 x 155.2		65 x 150 x 185.2	
Reference				
Servo drive reference ①	LXM16DU04M2X		LXM16DU07M2X	
Servo motor reference ②	BCH16HD04330A5C	BCH16HD04330F5C	BCH16HF07330A5C	BCH16HF07330F5C

Power output (kW)	1			
Nominal speed of rotation (min-1)	3000		2000	
Nominal torque (N.m)	3.18		4.77	
With holding brake	No	Yes	No	Yes
Inertia -without holding brake (kg.cm²)	2.65	2.75	10.88	11.58
Motor inertia type	Low		High	
Dimensions: W x H x D (mm)	65 x 150 x 185.2			
Reference				
Servo drive reference ①	LXM16DU10M2X			
Servo motor reference ②	BCH16LH10330A6C	BCH16LH10330F6C	BCH16HM10230A6C	BCH16HM10230F6C

Power output (kW)	0.85		1.5	
Nominal speed of rotation (min-1)	1500		2000	
Nominal torque (N.m)	5.39		7.16	
With holding brake	No	Yes	No	Yes
Inertia -without holding brake (kg.cm²)	14.08	14.78	14.8	15.5
Motor inertia type	High			
Dimensions: W x H x D (mm)	65 x 150 x 185.2			
Reference				
Servo drive reference ①	LXM16DU15M2X			
Servo motor reference ②	BCH16HM08130A6C	BCH16HM08130F6C	BCH16HM15230A6C	BCH16HM15230F6C

Easy Lexium 16D Motion control - Connection accessories



Connectors			
Designation	SCSI-26 connector for creating control cordsets (CN1) 1	Connector for connection of power supply, external braking resistor and motor power output (CNP) 2	10-pin connector for creating encoder cordsets (CN2) For cable crosssection: 2*0.5 mm ² + 3 x 2 x 0.2 mm ² 3
Description	1 x SCSI-26 connector 1 x shielded chassis 1 x connector housing 2 x screw for fix to connection port 2 x screw for connector housing	1 x connector	1 x IEEE1394 10-pin connector 1 x shielded chassis 1 x connector housing 2 x spring clamp for fix to connection port
For use with	LXM16DU01M2X, LXM16DU02M2X,	LXM16DU04M2X, LXM16DU07M2X,	LXM16DU10M2X, LXM16DU15M2X
Reference	VW3M4A11	VW3M4A21	VW3M4A31



Control cordsets and Power cordset kit			
Designation	Pre-assembled control cordsets dedicated to 24VDC pulse train with interface module (CN1)	Pre-assembled control cordsets dedicated to 3.3 VDC pulse train with interface module (CN1)	Power cordset shield connection plate
Description	1 x pre-assembled control cordsets (Length: 1 m/3.28 ft.) 1 x interface module	1 x pre-assembled control cordsets (Length: 1 m/3.28 ft.) 1 x interface module	1 x grounding chassis 1 x spring clamp connector
For use with	LXM16DU01M2X, LXM16DU02M2X,	LXM16DU04M2X, LXM16DU07M2X,	LXM16DU10M2X, LXM16DU15M2X
Reference	VW3M4A12	VW3M4A15	VW3M2A31



Programming cables	
Designation	Programming cables
Description	Transferring a configuration from a PC to the Lexium 16D servo drive via the CN3 interface (USB mini-B) on Lexium 16D servo drives
Length (m)	3 1.8
Reference	TCSXCNAMUM3P (1) BMXXCAUSBH018

(1) Unshielded, non-grounded cable. Only for use on temporary connections. For permanent connections, use cable reference BMXXCAUSBH018.

Easy Lexium 16D Motion control - External braking resistor



External braking resistors					
For use with Servo drives		LXM16DU07M2X, LXM16DU10M2X, LXM16DU15M2X			
Ohmic value (Ω)		27			
Continuous power (PPr)		100	200	400	
Peak energy (EPk)	115 V (Ws)	4,200	9,700	25,500	
	230 V (Ws)	3,800	7,400	18,100	
	400 V (Ws)	1,900	4,900	11,400	
	480 V (Ws)	1,900	4,300	10,500	
Reference	Connection cable (m)	0.75	VW3A7602R07	VW3A7603R07	VW3A7604R07
		2	VW3A7602R20	VW3A7603R20	VW3A7604R20
		3	–	VW3A7603R30	VW3A7604R30

For use with Servo drives		LXM16DU01M2X, LXM16DU02M2X, LXM16DU04M2X, LXM16DU07M2X, LXM16DU10M2X, LXM16DU15M2X				
Ohmic value (Ω)		72			100	
Continuous power (PPr)		100	200	400	100	
Peak energy (EPk)	115 V (Ws)	5,500	14,600	36,600	4,400	
	230 V (Ws)	3,700	9,600	24,700	4,400	
	400 V (Ws)	2,500	6,600	16,200	2,900	
	480 V (Ws)	2,300	6,000	15,500	2,900	
Reference	Connection cable (m)	0.75	VW3A7605R07	VW3A7606R07	VW3A7607R07	VW3A7608R07
		2	VW3A7605R20	VW3A7606R20	VW3A7607R20	VW3A7608R20
		3	VW3A7605R30	VW3A7606R30	VW3A7607R30	VW3A7608R30

Note: The total continuous power dissipated in the external braking resistor(s) must be less than or equal to the nominal power of the Lexium 16 servo drive.

Easy Lexium 16D Motion control - Additional EMC input filters



Additional EMC filters			
For servo drive		LXM16DU01M2X, LXM16DU02M2X, LXM16DU04M2X	LXM16DU07M2X, LXM16DU10M2X, LXM16DU15M2X
Maximum servo motor shielded cable length (1)		25	25
Reference		VW3A4420	VW3A4421

(1) Conforming to EN 55011 class A Gr2, IEC/EN 61800-3 category C3 in environment 2. Switching frequency 8 kHz.

Easy Lexium 16D Motion control - Motor starters, Protection using class J fuses



Motor starters - Combinations				
Servo drive	Nominal power (kW)	0.1	0.2	0.4
	Main number of phase	1	1	1
	Reference	① LXM16DU01M2X	LXM16DU02M2X	LXM16DU04M2X
Circuit-breaker	Rating (A)	10	10	10
	Reference	② GV2P14		
Contactor	Reference (1) (2)	③ LC1K0610●●		LC1K09●●
Servo drive	Nominal power (kW)	0.75	1	1.5
	Main number of phase	1	1	1
	Reference	① LXM16DU07M2X	LXM16DU10M2X	LXM16DU15M2X
Circuit-breaker	Rating (A)	10	10	14
	Reference	② GV2P14	GV2P14	GV2P16
Contactor	Reference (1) (2)	③ LC1K09●●	LC1K12●●	LC1D18●●

(1) Composition of the contactors:
 LC1K0610●●: 3 poles + 1 N/O auxiliary contact
 LC1K09●●, LC1K12●●: 4 poles
 LC1D18●●: 3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact
 Please refer to CONTACTORS AND PROTECTION RELAYS page on our web site

(2) Replace ●● with the control circuit voltage code given in the table below:

LC1K	Volts ~	220 Volts ~	230 Volts ~	240 Volts ~
	50/60 Hz	M7	P7	U7
LC1D	Volts ~	220/230 Volts ~	230 Volts ~	230/240 Volts ~
	50 Hz	M5	P5	U5
	60 Hz	M6	-	U6
	50/60 Hz	M7	P7	U7

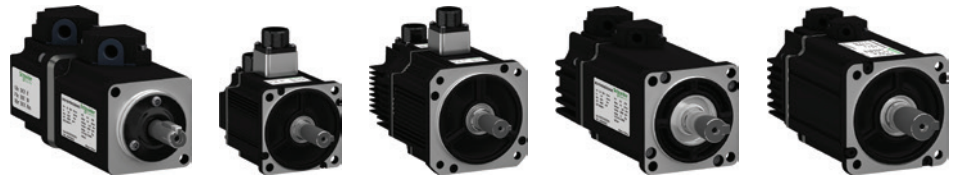
For other available voltages between 24 V and 660 V, or a DC control circuit, please contact our Customer Care Center

Protection using class J fuses (UL certification)

Mains supply voltage: 200...230 V a 50/60Hz

Fuse to be placed upstream (A)	5	5	20	20	25	40	
Servo drive	Nominal power (kW)	0.1	0.2	0.4	0.75	1	1.5
	Reference	LXM16DU01M2X	LXM16DU02M2X	LXM16DU04M2X	LXM16DU07M2X	LXM16DU10M2X	LXM16DU15M2X

Easy Lexium 16D Motion control - BCH16 servo motors



BCH16 servo motors		B	C	H	16	•	•	••	•	•	•	•	•	•	C	
Brushless servo motor																
Inertia	Low inertia					L										
	High inertia					H										
Flange size (mm)	40						B									
	60						D									
	80						F									
	100						H									
	130						M									
Rated output (W)	100							01								
	200							02								
	400							04								
	750							07								
	850							08								
	1 kW							10								
	1.5 kW							15								
Power supply ~ 220 V Winding type (rpm)	1000/1500								1							
	2000									2						
	3000										3					
Shaft end	Keyed shaft (shaft & housing IP 65)										3					
Encoder	2500 ppr incremental encoder											0				
Holding brake	Without brake													A		
	With brake (option)													F		
Connections	Free leads with connectors (BCH16•B, BCH16•D, BCH16•F motors only)														5	
	MIL connectors (BCH16•H, BCH16•M, BCH16•R motors only)														6	
Mechanical motor design	Motor compatible with Asian style mounting standards															C

Easy Lexium 16D Motion control - Connection components



Power cordsets - Shielded and Unshielded

Designation	①	Equipped with one plastic connector (servo motor side), and a free lead (servo drive side)						
For use	From servo drive	LXM16DU01M2X, LXM16DU02M2X, LXM16DU04M2X, LXM16DU07M2X						
	To servo motor	BCH16LB01330●5C, BCH16HD02330●5C, BCH16HD04330●5C, BCH16HF07330●5C						
For cable cross-section(mm²)		4G0.75						
Length (m)		1.5	3	5	10	15	20	25
Reference	Unshielded power cordsets	VW3M5A11RA5	VW3M5A11R03	VW3M5A11R05	VW3M5A11R10	VW3M5A11R15	VW3M5A11R20	VW3M5A11R25
	Shielded power cordsets	VW3M5A11RA5S	VW3M5A11R03S	VW3M5A11R05S	VW3M5A11R10S	VW3M5A11R15S	VW3M5A11R20S	VW3M5A11R25S

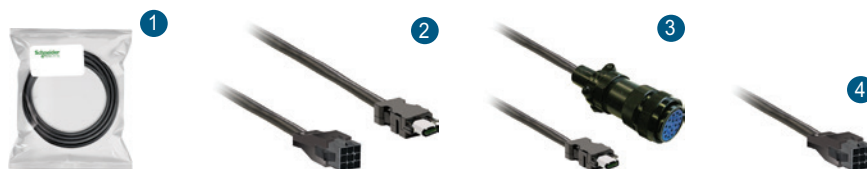
Designation	②	Equipped with one MIL connector (servo motor side), and a free lead (servo drive side)						
For use	From servo drive	LXM16DU10M2X, LXM16DU15M2X						
	To servo motor	BCH16HM08130A6C, BCH16LH10330A6C, BCH16HM10230A6C, BCH16HM15230A6C						
For cable cross-section(mm²)		4G2						
Length (m)		1.5	3	5	10	15	20	25
Reference	Unshielded power cordsets	VW3M5A21RA5	VW3M5A21R03	VW3M5A21R05	VW3M5A21R10	VW3M5A21R15	VW3M5A21R20	VW3M5A21R25
	Shielded power cordsets	VW3M5A21RA5S	VW3M5A21R03S	VW3M5A21R05S	VW3M5A21R10S	VW3M5A21R15S	VW3M5A21R20S	VW3M5A21R25S

Designation	③	Equipped with one MIL connector (servo motor side), and a free lead (servo drive side) Integrating brake control						
For use	From servo drive	LXM16DU10M2X, LXM16DU15M2X						
	To servo motor	BCH16HM08130F6C, BCH16LH10330F6C, BCH16HM10230F6C, BCH16HM15230F6C						
For cable cross-section(mm²)		6G2						
Length (m)		1.5	3	5	10	15	20	25
Reference	Unshielded power cordsets	VW3M5A22RA5	VW3M5A22R03	VW3M5A22R05	VW3M5A22R10	VW3M5A22R15	VW3M5A22R20	VW3M5A22R25
	Shielded power cordsets	VW3M5A22RA5S	VW3M5A22R03S	VW3M5A22R05S	VW3M5A22R10S	VW3M5A22R15S	VW3M5A22R20S	VW3M5A22R25S

Motor power connectors

Designation	Plastic connector ①	MIL connector ②
Use for	for creating power cordsets	
For use with	BCH16LB01330●5C, BCH16HD02330●5C, BCH16HD04330●5C, BCH16HF07330●5C	BCH16HM08130A6C, BCH16LH10330A6C, BCH16HM10230A6C, BCH16HM15230A6C
For cable cross-section(mm²)	4G0.75	4G2.0
Reference	VW3M5A11	VW3M5A21

Easy Lexium 16D Motion control - Connection components



Unshielded brake control cordsets

Designation	Equipped with one plastic connector (servo motor side), and a free lead (servo drive side) ①						
For use	From servo drive	LXM16DU01M2X, LXM16DU02M2X, LXM16DU04M2X, LXM16DU07M2X					
	To servo motor	BCH16LB01330F5C, BCH16HD02330F5C, BCH16HD04330F5C, BCH16HF07330F5C					
For cable cross-section(mm²)	2 x 0.5						
Length (m)	1.5	3	5	10	15	20	25
Reference	VW3M5A12RA5	VW3M5A12R03	VW3M5A12R05	VW3M5A12R10	VW3M5A12R15	VW3M5A12R20	VW3M5A12R25

Brake connectors

Designation	Plastic connector ①	Mil connector ③
Use for	for creating brake control cordsets	for creating power & brake control cordsets
For use with	BCH16LB01330F5C, BCH16HD02330F5C, BCH16HD04330F5C, BCH16HF07330F5C	BCH16HM08130F6C, BCH16LH10330F6C, BCH16HM10230F6C, BCH16HM15230F6C
For cable cross-section(mm²)	2 x 0.5	6G2.0
Reference	VW3M5A12	VW3M5A22

Shielded encoder cordsets

Designation	Equipped with one plastic connector (servo motor side), and VW3M4A31 connector (servo drive side) ②						
For use	From servo drive	LXM16DU01M2X, LXM16DU02M2X, LXM16DU04M2X, LXM16DU07M2X					
	To servo motor	BCH16LB01330●5C, BCH16HD02330●5C, BCH16HD04330●5C, BCH16HF07330●5C					
For cable cross-section(mm²)	2 x 0.5 + 3 x 2 x 0.2						
Length (m)	1.5	3	5	10	15	20	25
Reference	VW3M8A11RA5	VW3M8A11R03	VW3M8A11R05	VW3M8A11R10	VW3M8A11R15	VW3M8A11R20	VW3M8A11R25

Designation	Equipped with one MIL connector (servo motor side), and VW3M4A31 connector (servo drive side) ③						
For use	From servo drive	LXM16DU10M2X, LXM16DU15M2X					
	To servo motor	BCH16HM08130F6C, BCH16LH10330F6C, BCH16HM10230F6C, BCH16HM15230F6C					
For cable cross-section(mm²)	2 x 0.5 + 3 x 2 x 0.2						
Length (m)	1.5	3	5	10	15	20	25
Reference	VW3M8A21RA5	VW3M8A21R03	VW3M8A21R05	VW3M8A21R10	VW3M8A21R15	VW3M8A21R20	VW3M8A21R25

Motor encoder connectors

Designation	Plastic connector ④	Mil connector ③
Use for	for creating encoder cordsets	
For use with	BCH16LB01330●5C, BCH16HD02330●5C, BCH16HD04330●5C, BCH16HF07330●5C	BCH16HM08130●6C, BCH16LH10330●6C, BCH16HM10230●6C, BCH16HM15230●6C
For cable cross-section(mm²)	2 x 0.5 + 3 x 2 x 0.2	
Reference	VW3M8A11	VW3M8A21

Easy Lexium 26 servo drive and BCH2 servo motor combinations



Easy Lexium 26 servo drive and BCH2 servo motor: single-phase and 3-phase supply voltage: 200/240 VAC

Power output (kW)	0.05	0.1	0.2	0.3	
Nominal speed of rotation (min-1)	3000	3,000	3,000	1,000	
Nominal torque (N.m)	0.16	0.32	0.64	2.86	
Max peak torque (N.m)	0.48	0.96	1.92	8.59	
Inertia -without holding brake (kg.cm²)	0.054	0.075	0.16	6.63	
Motor inertia type	Medium	Medium	Low	Medium	
Dimensions: W x H x D (mm)	55 x 150 x 146				
Reference	Servo drive reference	LXM26DUA5M3X	LXM26DU01M3X	LXM26DU02M3X	LXM26DU04M3X
	Servo motor reference	With holding brake BCH2MBA533CF5C	With holding brake BCH2MB0133CF5C	With holding brake BCH2LD0233CF5C	With holding brake BCH2MM0313CF6C
	Without holding brake	BCH2MBA533CA5C	BCH2MB0133CA5C	BCH2LD0233CA5C	BCH2MM0313CA6C

Power output (kW)	0.4	0.4	0.5	0.6	
Nominal speed of rotation (min-1)	3,000	3,000	2,000	1,000	
Nominal torque (N.m)	1.27	1.27	2.39	5.73	
Max peak torque (N.m)	3.81	3.81	7.16	17.19	
Inertia -without holding brake (kg.cm²)	0.27	0.67	6.63	6.63	
Motor inertia type	Low	Low	Medium	Medium	
Dimensions: W x H x D (mm)	55 x 150 x 146				
Reference	Servo drive reference	LXM26DU04M3X	LXM26DU04M3X	LXM26DU07M3X	LXM26DU07M3X
	Servo motor reference	With holding brake BCH2LD0433CF5C	With holding brake BCH2LF0433CF5C	With holding brake BCH2MM0523CF6C	With holding brake BCH2MM0613CF6C
	Without holding brake	BCH2LD0433CA5C	BCH2LF0433CA5C	BCH2MM0523CA6C	BCH2MM0613CA6C

Power output (kW)	0.75	0.75	0.85	0.9	
Nominal speed of rotation (min-1)	3,000	3,000	1,500	1,000	
Nominal torque (N.m)	2.39	2.39	5.39	8.59	
Max peak torque (N.m)	7.16	7.16	13.8	25.77	
Inertia -without holding brake (kg.cm²)	1.19	1.54	13.5	9.7	
Motor inertia type	Low	High	Medium	Medium	
Dimensions: W x H x D (mm)	55 x 150 x 146		55 x 150 x 177		
Reference	Servo drive reference	LXM26DU07M3X	LXM26DU07M3X	LXM26DU10M3X	LXM26DU10M3X
	Servo motor reference	With holding brake BCH2LF0733CF5C	With holding brake BCH2HF0733CF5C	With holding brake BCH2MM0813CF6C	With holding brake BCH2MM0913CF6C
	Without holding brake	BCH2LF0733CA5C	BCH2HF0733CA5C	BCH2MM0813CA6C	BCH2MM0913CA6C

Power output (kW)	1	1	1.5	
Nominal speed of rotation (min-1)	3,000	2,000	2,000	
Nominal torque (N.m)	3.18	4.77	7.16	
Max peak torque (N.m)	9.54	14.3	21.48	
Inertia -without holding brake (kg.cm²)	2.4	8.41	9.7	
Motor inertia type	Low	High	Medium	
Dimensions: W x H x D (mm)	55 x 150 x 177			
Reference	Servo drive reference	LXM26DU10M3X	LXM26DU10M3X	LXM26DU15M3X
	Servo motor reference	With holding brake BCH2LH1033CF6C	With holding brake BCH2HM1023CF6C	With holding brake BCH2MM1523CF6C
	Without holding brake	BCH2LH1033CA6C	BCH2HM1023CA6C	BCH2MM1523CA6C

Easy Lexium 26 servo drive and BCH2 servo motor combinations



Easy Lexium 26 servo drive and BCH2 servo motor: 3-phase supply voltage: 200/240 VAC					
Power output (kW)	2.0		2.0	2.0	3.0
Nominal speed of rotation (min-1)	3,000		2,000	2,000	1,500
Nominal torque (N.m)	6.37		9.55	9.55	14.32
Max peak torque (N.m)	19.11		28.65	28.65	42.97
Inertia -without holding brake (kg.cm ²)	4.26		13.5	34.68	53.56
Motor inertia type	Low		Medium	High	Medium
Dimensions: W x H x D (mm)	62 x 170 x 191.6				117.4 x 234 x 193
Reference	Servo drive reference	LXM26DU20M3X	LXM26DU20M3X	LXM26DU20M3X	LXM26DU30M3X
	Servo motor reference	With holding brake	BCH2LH2033CF6C	BCH2MM2023CF6C	BCH2HR2023CF6C
		Without holding brake	BCH2LH2033CA6C	BCH2MM2023CA6C	BCH2MR3023CF6C
			BCH2HR2023CA6C	BCH2MR3023CA6C	
Power output (kW)	3.0		3.5	4.5	5.5
Nominal speed of rotation (min-1)	2,000		2,000	1,500	1,500
Nominal torque (N.m)	19.1		16.7	26.65	35.01
Max peak torque (N.m)	57.29		50.3	71.62	87.53
Inertia -without holding brake (kg.cm ²)	53.56		53.56	73.32	103.34
Motor inertia type	Medium		Medium	Medium	Medium
Dimensions: W x H x D (mm)	117.4 x 234 x 193				157 x 304 x 217
Reference	Servo drive reference	LXM26DU30M3X	LXM26DU45M3X	LXM26DU45M3X	LXM26DU55M3X
	Servo motor reference	With holding brake	BCH2MR3013CF6C	BCH2MR3523CF6C	BCH2MR4513CF6C
		Without holding brake	BCH2MR3013CA6C	BCH2MR3523CA6C	BCH2MR4513CA6C
			BCH2MR5513●●6C	BCH2MR5513●A6C	
Power output (kW)	7.5				
Nominal speed of rotation (min-1)	1,500				
Nominal torque (N.m)	47.75				
Max peak torque (N.m)	119.37				
Inertia -without holding brake (kg.cm ²)	142.7				
Motor inertia type	Medium				
Dimensions: W x H x D (mm)	157 x 304 x 217				
Reference	Servo drive reference	LXM26DU75M3X			
	Servo motor reference	With holding brake	BCH2MR7513●●6C		
		Without holding brake	BCH2MR7513●A6C		

Easy Lexium 26 servo drive - Configuration tools



SoMove setup software	
Description	USB/RJ45 cordset 1 Used to connect a PC to the device (Lexium Easy 26): this cable is 2.5 m/8.20 ft long and has a USB connector (PC end) and an RJ45 connector (device end)
Reference	TCSMCNAM3M002P
Multi-Loader configuration tool	
Description	Multi-Loader configuration tool 2 Supplied with: <ul style="list-style-type: none"> ■ 1 cordset equipped with 2 RJ45 connectors ■ 1 cordset equipped with one type A USB connector and one mini B USB connector ■ 1 x 2 GB SD memory card ■ 1 x female/female RJ 45 adapter ■ 4 AA 1.5 V LRG round batteries
Reference	VV3A8121
	Cordset for Multi-Loader tool 3 For connecting the Multi-Loader tool to the Lexium Easy 26 servo drive in its packaging. Equipped with: <ul style="list-style-type: none"> ■ A non-locking RJ45 connector with special mechanical catch on the drive end and ■ An RJ45 connector on the Multi-Loader end
Reference	VV3A8126

Easy Lexium 26 servo drive - Accessories



Connection accessories					
Designation	Replacement connector sets (sold in lots of 3)			I/O connector (sold in lots of 3)	I/O terminal block module
For use with	0.05 kW, 0.1 kW, 0.2 kW, 0.4 kW, 0.75 kW, 1 kW and 1.5 kW drives	2 kW drive	3 kW and 4.5 kW drives	Lexium Easy 26	Lexium Easy 26
Description	1 3 connectors: ■ 1 for motor ■ 1 for resistor ■ 1 for 220 V ~ power	2 3 connectors: ■ 1 for motor ■ 1 for resistor ■ 1 for 220 V ~ power	3 3 connectors: ■ 1 for motor ■ 1 for resistor ■ 1 for 220 V ~ power	4 Sub-D 50-pin connector for CN1 I/O interface	5 Terminal block + Cordset (consisting of 2 Sub-D 50-pin connectors type VW3M1C12 and 0.5 m cable) for CN1 I/O interface connection
Reference	VW3M4C21	VW3M4C23	VW3M4C24	VW3M1C12	VW3M1C13
Description	I/O connection cordsets				
Use	Equipped with one SUB-D 50-pin connector for connection to the CN1 interface (drive end), and open end (controller end)				
Length (m)	1	2	3		
Reference	VW3M1C10R10	VW3M1C10R20	VW3M1C10R30		



Accessories	
Description	Application name plate (sold in lots of 50)
Use	This contains information about the servo drive. To be inserted in a dedicated slot on top of the servo drive
Dimensions W x H (mm)	38.5 x 13
Reference	VW3M2501

Easy Lexium 26 servo drive - Braking resistors

7



External braking resistor					
Ohmic value (W)	10		27		
Continuous power	400		100	200	400
Peak energy 230V (Ws)	13,300		3,800	7,400	18,100
Reference	Length of connection cable (m)	0.75	VW3A7601R07	VW3A7602R07	VW3A7603R07
		2	VW3A7601R20	VW3A7602R20	VW3A7603R20
		3	VW3A7601R30	VW3A7602R30	VW3A7603R30
Ohmic value (W)	72		10		
Continuous power	200		400	956	956
Peak energy 230V (Ws)	9,600		24,700	–	–
Reference	Length of connection cable (m)	0.75	VW3A7606R07	VW3A7607R07	VW3A7734
		2	VW3A7606R20	VW3A7607R20	–
		3	VW3A7606R30	VW3A7607R30	–

Note: The total continuous power dissipated in the external braking resistor(s) must be less than or equal to the nominal power of the Easy Lexium 26 servo drive.

Easy Lexium 26 servo drive - Additional EMC input filters



Additional EMC input filters			
Single-phase supply voltage			
For servo drives (max. nominal power) Combination	50 W to 750 W servo drives 1 x EMC filter and a single Lexium Easy 26 servo drive	1 kW and 1.5 kW servo drives 1 x EMC filter and a single Lexium Easy 26 servo drive	7.5 kW max servo drives 1 x common EMC filter and several Lexium Easy 26 servo drives
Line current (A)	9	16	24
Reference	VW3A4420	VW3A4421	VW3A4426
Three-phase supply voltage			
For servo drives (max. nominal power) Combination	50 W to 1.5 kW, 2kW and 3kW servo drives 1 x EMC filter and a single Lexium Easy 26 servo drive	4.5 kW servo drives 1 x EMC filter and a single Lexium Easy 26 servo drive	Up to 10 kW servo drives 1 x common EMC filter and several Lexium Easy 26 servo drives
Line current (A)	15	25	47
Reference	VW3A4422	VW3A4423	VW3A4424

Easy Lexium 26 servo drive - Protection using fuses



Combinations - circuit-breakers for single drive installation according to IEC 60364-5-52						
Servo drive	Nominal power (kW)	0.05	0.1	0.2	0.4	0.75
	Main number of phase	1 or 3				
	Reference	① LXM26DUA5M3X	LXM26DU01M3X	LXM26DU02M3X	LXM26DU04M3X	LXM26DU07M3X
Circuit-breaker	Rating (A)	10				
	Reference	② GV2P14				
Contactor	Reference (1) (2)	③ LC1K0610●●			LC1K09●●	
Servo drive	Nominal power (kW)	1	1	2	3	4
	Main number of phase	1 or 3			3	
	Reference	① LXM26DU10M3X	LXM26DU15M3X	LXM26DU20M3X	LXM26DU30M3X	LXM26DU45M3X
Circuit-breaker	Rating (A)	10	14	18	18	23
	Reference	② GV2P14	GV2P16	GV2P20	GV2P20	GV2P21
Contactor	Reference (1) (2)	③ LC1K12●●	LC1D18●●	LC1D32●●	LC1D32●●	LC1D65●●
Servo drive	Nominal power (kW)	5.5		7.5		
	Main number of phase	3				
	Reference	① LXM26DU55M3X	LXM26DU75M3X			
Circuit-breaker	Rating (A)	32		65		
	Reference	② GV2P32	GV3P65			
Contactor	Reference (1) (2)	③ LC1D65●●	LC1D65●●			

(1) Composition of the contactors:
 LC1 K06: 3 poles + 1 N/O auxiliary contact
 LC1 D●●: 3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact
 Please refer to the "Control and protection components" catalog.

(2) Replace ●● with the control circuit voltage code given in the table below:

LC1K	Volts ~	220 Volts ~	230 Volts ~	240 Volts ~
	50/60 Hz	M7	P7	U7
	LC1D	Volts ~	220/230 Volts ~	230 Volts ~
50 Hz		M5	P5	U5
60 Hz		M6	-	U6
	50/60 Hz	M7	P7	U7

For other available voltages between 24 V and 660 V, or a DC control circuit, please contact our Customer Care Center



Easy Lexium 26 servo drive - Protection using class J fuses



Protection using class J fuses (UL certification) - Mains supply voltage: 200...240 V a 50/60Hz

Fuse to be placed upstream (A)	5	5	5	20	20
Nominal power (kW)	0.05	0.1	0.2	0.4	0.75
Reference	LXM26DUA5M3X	LXM26DU01M3X	LXM26DU02M3X	LXM26DU04M3X	LXM26DU07M3X
Fuse to be placed upstream (A)	25	40	60	80	160
Nominal power (kW)	1	1	2	3	4.5
Reference	LXM26DU10M3X	LXM26DU15M3X	LXM26DU20M3X	LXM26DU30M3X	LXM26DU45M3X
Fuse to be placed upstream (A)	63	63			
Nominal power (kW)	5.5	7.5			
Reference	LXM26DU55M3X	LXM26DU75M3X			

Easy Lexium 26 servo drive - Holding brake controller



Holding brake controller

Description	24 V $\overline{\text{---}}$ power supply Max. power 0.05 kW IP 20, for mounting on 55 mm \perp rail
Reference	VW3M3103

Easy Lexium 26 servo drive - BCH2 servo motors



BCH2 servo motors		B	C	H	2	•	•	••	•	•	C	•	•	C	
Brushless servo motor															
Inertia	Low inertia					L									
	Medium inertia					M									
	High inertia					H									
Flange size (mm)	40						B								
	60						D								
	80						F								
	100						H								
	130						M								
	180						R								
Rated output (W)	50							A5							
	100							01							
	200							02							
	300							03							
	400							04							
	500							05							
	600							06							
	750							07							
	850							08							
	1 kW							10							
	1.5 kW							15							
	2 kW							20							
	3 kW							30							
	3.5 kW							35							
4.5 kW							45								
5.5 kW							55								
7.5 kW							75								
Power supply ~ 220 V	1000/1500								1						
	2000								2						
	3000								3						
Winding type (rpm)	1000/1500									3					
	2000														
Shaft end	Keyed shaft (shaft & housing IP 65)														
	High resolution single-turn absolute encoder, 20-bit resolution													C	
Encoder	High resolution multi-turn absolute encoder, 20 bit resolution, 4096 turns													M	
	Without brake														A
Holding brake	With brake (option)														F
	Free leads with connectors (BCH2•B/•D/•F motors only)														5
Connections	MIL connectors (BCH2•H/pM/•R motors only)														6
	Motor compatible with Asian style mounting standards														C



Easy Lexium 26 servo drive - Connection components



Shielded power cordsets for BCH2 motors without brake

Connector		1 Equipped with one quick connector (servo motor end), and open end (servo drive end)	2 Equipped with one MIL connector (servo motor end), and open end (servo drive end)					
AWG/mm²		AWG18 / 4 x 1	AWG16 / 4 x 1.5	AWG12 / 4 x 4	AWG10 / 4 x 6	AWG8 / 4 x 8		
Reference	Length (m)	1.5	VW3M5D1AR15	-	-	-		
		3	VW3M5D1AR30	VW3M5D2AR30	VW3M5D4AR30	VW3M5D6AR30	VW3M5D7AR30	VW3M5D8AR30
		5	VW3M5D1AR50	VW3M5D2AR50	VW3M5D4AR50	VW3M5D6AR50	VW3M5D7AR50	VW3M5D8AR30

Shielded power cordsets for BCH2 motors with brake

Connector		1 Equipped with one quick connector (servo motor end), and open end (servo drive end)	2 Equipped with one MIL connector (servo motor end), and a free lead (servo drive end)					
AWG/mm²		AWG18 / (4 x 1) + (2 x 1)	AWG16 / (4 x 1.5) + (2 x 1)	AWG12 / (4 x 4) + (2 x 1.5)	(4 x 6) + (2 x 1.5) / AWG10	AWG8 / (4 x 8) + (2 x 1.5)		
Reference	Length (m)	3	VW3M5D1FR30	VW3M5D2FR30	VW3M5D4FR30	VW3M5D6FR30	VW3M5D7AF30	VW3M5D8FR30
		5	VW3M5D1FR50	VW3M5D2FR50	VW3M5D4FR50	VW3M5D6FR50	VW3M5D7AF50	VW3M5D8FR50

Motor power connector kits

Description		3 Motor power connector kits (sold in lots of 3)	4 Power MIL connector kits			
For use with		BCH2●B/●D/●F motors (flange size: 40/60/80 mm) with flying lead connection, without brake	BCH2●B/●D/●F motors (flange size: 40/60/80 mm) with flying lead connection, with brake	BCH2●H/●M motors (flange size: 100/130 mm) with or without brake	BCH2●R motors (flange size: 180 mm, from 2.0 kW to 5.5 kW) with or without brake	BCH2●R motors (flange size: 180 mm, 7.5 kW)
Reference		VW3M5D1A	VW3M5D1F	VW3M5D2A	VW3M5D2B	VW3M5D2C

Shielded encoder cordsets

Description		1 Equipped with one plastic connector (servo motor end), and a firewire connector (servo drive end)	4 Equipped with one MIL connector (servo motor end), and a firewire connector (servo drive end)			
For use with		BCH2●B/●D/●F motors, for connection to CN2 interface	BCH2●H/●M/●R motors, for connection to CN2 interface			
Composition		10 x 0.13 mm ² / 10 x 26 AWG		10 x 0.13 mm ² / 10 x 26 AWG		
Reference	Length (m)	1.5	VW3M8D1AR15	-		
		3	VW3M8D1AR30	VW3M8D2AR30		
		5	VW3M8D1AR50	VW3M8D2AR50		

Encoder connector kits

Description		3 Encoder connector kits including one plastic connector (servo motor end), and a firewire connector (servo drive end) (sold in lots of 2)	4 Encoder connector kits including one MIL connector (servo motor end), and a firewire connector (servo drive end) (sold in lots of 2)			
For use with		BCH2●B/●D/●F motors (flange: 40/60/80 mm) with flying lead connection	BCH2●H/●M/●R motors (flange: 100/130/180 mm) with MIL connector			
Reference		VW3M8D1A	VW3M8D2A			

Accessories for use with BCH2 motors with multi-turn absolute encoder

Description		5 Battery compartment	6 Battery 3.6 V			
For use with		BCH2 motors with multi-turn absolute encoder	BCH2 motors with multi-turn absolute encoder and battery compartment "VW3M8BATC"			
Reference		VW3M8BATC	VW3M9BATT			

Easy Lexium 26 servo drive - Connection components

Selection of motor connector kit or encoder connector kit, according to BCH2 motor type												
Motor	Motor power cable connector kit		Encoder connector kit	Motor power cable		Encoder cable						
	Without brake	With brake		Without brake	With brake							
BCH2MBA53●●5C	VW3M5D1A	VW3M5D1F	VW3M8D1A	VW3M5D1AR●●	VW3M5D1FR●●	VW3M8D1AR●●						
BCH2MB0133●●5C												
BCH2LD0233●●5C												
BCH2LD0433●●5C												
BCH2LF0433●●5C												
BCH2HF0733●●5C												
BCH2LF0733●●5C												
BCH2LH1033●●6C	VW3M5D2A	VW3M5D2A	VW3M8D2A	VW3M5D2AR●●	VW3M5D2FR●●	VW3M8D2AR●●						
BCH2LH2033●●6C												
BCH2MM0813●●6C												
BCH2MM0313●●6C												
BCH2MM0523●●6C												
BCH2MM0613●●6C												
BCH2HM1023●●6C												
BCH2MM0913●●6C												
BCH2MM1523●●6C												
BCH2MM2023●●6C												
BCH2HR2023●●6C							VW3M5D2B	VW3M5D2B	VW3M8D2A	VW3M5D4AR●●	VW3M5D4FR●●	VW3M8D2AR●●
BCH2MR3013●●6C												
BCH2MR3023●●6C												
BCH2MR3523●●6C												
BCH2MR4513●●6C												
BCH2MR551●●●6C	VW3M5D2B	VW3M5D2B	VW3M8D2A	VW3M5D7AR●●	VW3M5D7FR●●	VW3M8D2AR●●						
BCH2MR751●●●6C							VW3M5D2C	VW3M5D2C	VW3M8D2A	VW3M5D8AR●●	VW3M5D8FR●●	VW3M8D2AR●●



08. Easy Modicon Logic Controllers

Easy Modicon M100 logic controllers



Easy Modicon M100 logic controllers (1)				
Number of digital I/O	16 ¹	24 ²	32 ³	40 ³
Digital inputs	<ul style="list-style-type: none"> ■ 9 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 3 regular inputs ■ 2 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 14 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 8 regular inputs ■ 2 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 14 regular inputs ■ 2 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 24 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 18 regular inputs ■ 2 high speed inputs for HSC
Digital outputs (relay outputs)	7	10	12	16
Serial link (2)	1			
Supply voltage	110...220 VAC			
Programming software (3)	EcoStruxure Machine Expert - Basic ⁴			
Reference	TM100C16RN	TM100C24RN	TM100C32RN	TM100C40RN

(1) M100 controllers are supplied with:

- fixed screw terminal blocks for connecting the I/O
- a fixed screw terminal block for connecting the power supply
- a fixed screw terminal block for the serial link

(2) Each M100 logic controller has an embedded USB mini-B programming port.

(3) PC should be equipped with Windows 7 or 10 (32-bit or 64-bit). To download this software, please visit our site www.schneider-electric.com.

Easy Modicon M200 logic controllers



Easy Modicon M200 logic controllers (1)

Supply voltage	110...220 VAC		
Number of digital I/O	16	24	32
Digital inputs	<ul style="list-style-type: none"> ■ 9 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 1 regular input ■ 4 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 14 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 6 regular inputs ■ 4 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 12 regular inputs ■ 4 high speed inputs for HSC
Digital outputs (relay outputs)	7	10	12
Dimension (W x H x D)	110 x 70 x 90 ¹	130 x 70 x 90 ²	175 x 70 x 90 ³
Ethernet (RJ 45)	–	–	1
Serial link (2)	1	–	–
Reference	TM200C16R	TM200C24R	TM200CE24R TM200C32R

Supply voltage	110...220 VAC		
Number of digital I/O	32	40	60
Digital inputs	<ul style="list-style-type: none"> ■ 20 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 12 regular inputs ■ 4 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 24 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 16 regular inputs ■ 4 high speed inputs for HSC 	<ul style="list-style-type: none"> ■ 36 sink/source ■ 24 VDC input voltage ■ 4 fast inputs for FC ■ 28 regular inputs ■ 4 high speed inputs for HSC
Digital outputs (relay outputs)	12	16	24
Dimension (W x H x D)	175 x 70 x 90 ³	–	225 x 70 x 90 ⁴
Ethernet (RJ 45)	1	–	1
Serial link (2)	1	–	–
Reference	TM200CE32R	TM200C40R	TM200CE40R TM200C60R

Supply voltage	24 VDC		
Number of digital I/O	16		
Digital inputs	<ul style="list-style-type: none"> ■ 9 sink/source ■ 24 VDC input voltage 	<ul style="list-style-type: none"> ■ 4 fast inputs for FC ■ 1 regular input 	<ul style="list-style-type: none"> ■ 4 high speed inputs for HSC
Digital outputs	<ul style="list-style-type: none"> ■ 7 sink outputs ■ 5 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO) 	–	<ul style="list-style-type: none"> ■ 7 source outputs ■ 5 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)
Dimension (W x H x D)	110 x 70 x 90 ¹		
Ethernet (RJ 45)	–		
Serial link (2)	1		
Reference	TM200C16U		TM200C16T

Supply voltage	24 VDC		
Number of digital I/O	24		
Digital inputs	<ul style="list-style-type: none"> ■ 14 sink/source ■ 24 VDC input voltage 	<ul style="list-style-type: none"> ■ 4 fast inputs for FC ■ 6 regular inputs 	<ul style="list-style-type: none"> ■ 4 high speed inputs for HSC
Digital outputs	<ul style="list-style-type: none"> ■ 10 sink outputs ■ 8 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO) 	–	<ul style="list-style-type: none"> ■ 10 source outputs ■ 8 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)
Dimension (W x H x D)	130 x 70 x 90 ²		
Ethernet (RJ 45)	–	1	–
Serial link (2)	1		
Reference	TM200C24U	TM200CE24U	TM200C24T TM200CE24T

Supply voltage	24 VDC		
Number of digital I/O	40		
Digital inputs	<ul style="list-style-type: none"> ■ 24 sink/source ■ 24 VDC input voltage 	<ul style="list-style-type: none"> ■ 4 fast inputs for FC ■ 16 regular inputs 	<ul style="list-style-type: none"> ■ 4 high speed inputs for HSC
Digital outputs	<ul style="list-style-type: none"> ■ 16 sink outputs ■ 14 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO) 	–	<ul style="list-style-type: none"> ■ 16 source outputs ■ 14 regular transistor outputs ■ 2 fast outputs (PWM/PLS/PTO)
Dimension (W x H x D)	130 x 70 x 90 ³		
Ethernet (RJ 45)	–	1	–
Serial link (2)	1		
Reference	TM200C40U	TM200CE40U	TM200C40T TM200CE40T

(1) M200 controllers are supplied with:

- removable screw terminal blocks for connecting the I/O
- a removable screw terminal block for connecting the power supply
- a removable screw terminal block for the serial link

(2) Each M200 logic controller has an embedded USB mini-B programming port.

Easy Modicon M200 logic controllers - Accessories



Cartridges for Easy Modicon M200 logic controllers (1)

Description	Digital I/O cartridges	Communication cartridges	
Details	<ul style="list-style-type: none"> 2 digital inputs 2 transistor sink outputs Connection via screw terminal block 	1 additional RS485 serial link on screw terminal block	1 additional isolated RS485 serial link on screw terminal block
Reference	TMCR2DM4U	TMCR2SL1	TMCR2SL1A
Description	Analog I/O cartridges		
Details	<ul style="list-style-type: none"> 2 analog inputs (12-bit resolution) configurable as: <ul style="list-style-type: none"> - 0...10 V voltage - 0...20 mA/4...20 mA current Connection via screw terminal block 	<ul style="list-style-type: none"> 2 analog inputs (12-bit resolution) 0...10V/ 0...5V/ 0...20mA/ 4...20mA 1 analog output (12-bit resolution) 0...10V/ 0...5V/ 0...20mA/ 4...20mA Connection via screw terminal block 	<ul style="list-style-type: none"> 2 temperature inputs (12 or 14-bit resolution depending on input signal) type K, J, R, S, B, E, T, N, C, PT100, PT1000, NI100, NI1000 Connection via screw terminal block
Reference	TMCR2AI2	TMCR2AM3	TMCR2TI2
Description	Analog I/O cartridges		
Details	<ul style="list-style-type: none"> 2 analog outputs (12-bit resolution) 0...10 V voltage Connection via screw terminal block 	<ul style="list-style-type: none"> 2 analog outputs (12-bit resolution) 4...20 mA current Connection via screw terminal block 	
Reference	TMCR2AQ2V	TMCR2AQ2C	



Separate parts for Easy Modicon M200 logic controllers

Description	Cartridges cover ¹	RTC battery ²
Reference	TMARCOVER	TMARBAT1

Replacements parts for Easy Modicon M200 logic controllers ³

Description	Set of terminal blocks for connecting the I/O on M200 controllers	
Details	3-way terminal block for power supply connection	4-way terminal block for serial link connection
Reference	TMARTB3	TMARTB4

Expansion modules

Description	Modicon TM3 expansion modules	Modicon TM2 expansion modules
Details	Easy Modicon M200 logic controllers	
Reference	(2)	

(1) One cartridge for controllers with 16 and 24 I/O. Two cartridges maximum for controllers with 32, 40 and 60 I/O, only one of which can be a communication cartridge.

(2) See our list of compatible expansion modules on pages 4 and 5.

Easy Modicon M200 logic controllers - Product compatibility

Product compatibility

Expansion options			Number and type of I/O	M200 logic controllers			
				TM200C16R	TM200C16U	TM200C16T	
Cartridge	Digital I/O cartridge	TMCR2DM4U	2 digital inputs + 2 transistor sink outputs				
	Analog I/O cartridge	TMCR2AI2	2 voltage/current inputs				
		TMCR2AM3	2 voltage/current inputs + 1 voltage/current output				
		TMCR2TI2	2 temperature inputs				
		TMCR2AQ2V	2 voltage outputs				
		TMCR2AQ2C	2 current outputs				
	Communication cartridge	TMCR2SL1	1 RS485 serial link				
TMCR2SL1A		1 isolated RS485 serial link					
Modicon TM2	Digital modules	TM2DAI8DT	8 x 120 V ~ inputs				
		TM2DDI8DT	8 x 24 V = inputs				
		TM2DDI16DT	16 x 24 V = inputs				
		TM2DDI16DK	16 x 24 V = inputs (by HE10 connector)				
		TM2DDI32DK	32 x 24 V = inputs (by HE10 connector)				
		TM2DDO8TT	8 x 24 V = outputs				
		TM2DDO8UT	8 x 24 V = outputs				
		TM2DRA8RT	8 relay outputs				
		TM2DDO16TK	16 x 24 V = source transistor outputs				
		TM2DDO16UK	16 x 24 V = sink transistor outputs				
		TM2DRA16RT	16 relay outputs				
		TM2DDO32TK	32 x 24 V = source transistor outputs				
		TM2DDO32UK	32 x 24 V = sink transistor outputs				
		TM2DMM8DRT	4 x 24 V = inputs + 4 relay outputs				
		TM2DMM24DRF	16 x 24 V = inputs (spring type) + 8 relay outputs				
		Analog modules	TM2AMI2HT	2 voltage/current inputs			
			TM2AMI2LT	2 thermocouple inputs			
	TM2AMI4LT		4 voltage/current + temperature probe inputs				
	TM2AMI8HT		8 voltage/current inputs				
	TM2ARI8LRJ		8 temperature probe inputs				
	TM2ARI8LT		8 temperature probe inputs				
	TM2ARI8HT		8 temperature probe inputs				
	TM2AMO1HT		1 voltage/current output				
	TM2AVO2HT		2 voltage outputs				
	TM2AMM3HT		2 voltage/current inputs + 1 voltage/current output				
	TM2ALM3LT	2 thermocouple/temperature probe inputs + 1 voltage/current output					
	TM2AMM6HT	4 voltage/current inputs + 2 voltage/current outputs					

Possible to insert 2 cartridge/up to 4 modules

Possible to insert 1 cartridge/up to 4 modules

Easy Modicon M200 logic controllers - Product compatibility

Product compatibility

Expansion options		Number and type of I/O	M200 logic controllers			
			TM200C16R	TM200C16U	TM200C16T	
Modicon TM3	Digital modules	TM3DI8	8 x 24 V $\overline{\text{---}}$ sink/source inputs			
		TM3DI16	16 x 24 V $\overline{\text{---}}$ sink/source inputs			
		TM3DI32K	32 x 24 V $\overline{\text{---}}$ sink/source inputs			
		TM3DQ8R	8 x 24 V $\overline{\text{---}}$ /240 V a relay outputs			
		TM3DQ8T	8 x 24 V $\overline{\text{---}}$ source transistor outputs			
		TM3DQ8U	8 x 24 V $\overline{\text{---}}$ sink transistor outputs			
		TM3DQ16R	16 x 24 V $\overline{\text{---}}$ /240 V \sim relay outputs			
		TM3DQ16T	16 x 24 V $\overline{\text{---}}$ source transistor outputs			
		TM3DQ16U	16 x 24 V $\overline{\text{---}}$ sink transistor outputs			
		TM3DQ32TK	32 x 24 V $\overline{\text{---}}$ source transistor outputs			
		TM3DQ32UK	32 x 24 V $\overline{\text{---}}$ sink transistor outputs			
		TM3DM8R	4 x 24 V $\overline{\text{---}}$ sink/source inputs + 4 x 24 V $\overline{\text{---}}$ /240 V \sim relay outputs			
		TM3DM24R	16 x 24 V $\overline{\text{---}}$ sink/source inputs + 8 x 24 V $\overline{\text{---}}$ /240 V \sim relay outputs			
		TM3RDM16R	8 x 24 V $\overline{\text{---}}$ sink/source inputs + 8 x 24 V $\overline{\text{---}}$ /240 V \sim relay outputs			
	TM3RDM32R	16 x 24 V $\overline{\text{---}}$ sink/source inputs + 16 x 24 V $\overline{\text{---}}$ /240 V \sim relay outputs				
	Analog modules	TM3AI2H	2 voltage/current inputs			
		TM3AI4	4 voltage/current inputs			
		TM3TI4	4 voltage/current or temperature inputs			
		TM3AI8	8 voltage/current inputs			
		TM3TI8T	8 temperature inputs			
		TM3AQ2	2 voltage/current outputs			
		TM3AQ4	4 voltage/current outputs			
		TM3TM3	2 voltage/current or temperature inputs + 1 voltage/current outputs			
		TM3AM6	4 voltage/current inputs + 2 voltage/current outputs			

Possible to combine, up to 4 modules

Easy Modicon M200 logic controllers - Configuration

Configuration (1)(2)

Configuration limits	Logic controllers							
Maximum number of transistor outputs	130	137	137	130	140	140	132	132
Maximum number of relay outputs	71	64	64	74	64	64	76	76
References	TM200C16R	TM200C16T	TM200C16U	TM200C24R TM200CE24R	TM200C24T TM200CE24T	TM200C24U TM200CE24U	TM200C32R TM200CE32R	TM200C40R TM200CE40R

Configuration limits	Logic controllers		
Maximum number of transistor outputs	148	148	132
Maximum number of relay outputs	64	64	88
References	TM200C40T TM200CE40T	TM200C40U TM200CE40U	TM200C60R

(1) Modicon TM3 or TM2 digital I/O modules connect to Modicon M200 logic controllers with a maximum of 4 local I/O modules.

(2) The maximum number of Modicon TM3/TM2 expansion modules can be reduced by the number of transistor outputs or relay outputs used (see the table below). For more information on TM3/TM2 expansion modules, please visit our website www.schneider-electric.com.

Life Is On



Learn more about automation and control solutions
at www.schneider-electric.com

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Schneider Electric Industries SAS
35, rue Joseph Monier - CS 30323
F92506 Rueil-Malmaison Cedex