



Sample image

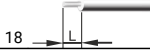
Datasheet

Article number: 70019588

Designation: KG160.T103/D-A066.STM

Description: Switch

IEC 60947-3 EN 60947-3, VDE 0660 Teil 107						
Rated insulation voltage Ui						
Voltage (V) AC / DC						
1000 AC						
Rated uninterrupted current Iu/Ith						
Current (A)	Ambient temperature (°C)	Peak temperature (°C)	additional requirements			
160	50	55	Ambient temperature +50°C during 24 hours with peaks up to +55°C			
Rated operational current Ie						
Utilization category		Voltage (V)		Current (A)		
AC-32A		20 - 400		160		
Rated operational power						
Utilization category	Voltage (V)	No. of phases	No. of poles	Power (kW)		
AC-3	220 - 240	3	3	30		
AC-3	380 - 440	3	3	45		
AC-3	660 - 690	3	3	37		
AC-23A	220 - 240	3	3	30		
AC-23A	380 - 440	3	3	55		
AC-23A	660 - 690	3	3	37		
Max. Fuse rating IEC						
Fuse characteristic		No. of Fuses		Current (A)		
gG		1		160		
UL60947-4-1 , UL508						
Nominal Voltage						
Voltage (V) AC / DC						
600 AC						
Rated insulation voltage Ui						
Voltage (V) AC / DC						
600 AC						
Rated thermal current						
Current (A)		Ambient temperature (°C)	Additional Text			
200		0 - 40	ON-OFF switch (Valid when connected with wire rated for 75°C)			
160		0 - 40	Change over switch (Valid when connected with wire rated for 75°C)			
Horsepower rating						
Across-the-Line Motor Starting		Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temperature [°C]
DOL		110 - 120	1	2	10	40
DOL		220 - 240	1	2	25	40
DOL		277 - 277	1	2	25	40
DOL		440 - 480	1	2	40	40
DOL		550 - 600	1	2	40	40
DOL		110 - 120	3	3	20	40
DOL		220 - 240	3	3	40	40
DOL		440 - 480	3	3	75	40
DOL		440 - 480	3	3	75	60
DOL		550 - 600	3	3	60	40
SCCR / Max. fuse rating						
Conditions of acceptability						
This device is suitable for use on circuits capable of delivering not more than 10kA rms symmetrical amperes, 600V ac max. when protected by Type RK1 fuses.						
Suitable for use on a circuit capable of delivering not more than 65000 rms symmetrical amperes at 600V max., when protected by 300A Class J fuses.						
Temp. rating of wire						
Temperature rating (°C)		Current (A)			Text	
75		--			--	
General Use						
AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series	
AC	277	200	1	1	1	
AC	600	200	1	2	1	
AC	600	200	3	3	1	
AC double-throw function	277	160	1	1	1	
AC double-throw function	600	160	1	2	1	

General Use						
AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series	
AC double-throw function	600	160	3	3	1	
General Information						
Text						
- The operating handle and position indicating means to be used with these manual motor controllers should be provided from the manufacturer, or the operating handle and position indicating means to be used should have been previously evaluated in combination with the manual motor controllers.						
CSA						
Nominal Voltage						
				Voltage (V)	AC / DC	
				600	AC	
Rated insulation voltage Ui						
				Voltage (V)	AC / DC	
				600	AC	
Rated thermal current						
		Current (A)	Ambient temperature (°C)		Additional Text	
		200	0 - 40		--	
Horsepower rating						
Across-the-Line Motor Starting				Voltage (V)	No. of phases	No. of poles
				110 - 120	1	2
DOL				220 - 240	1	2
DOL				277 - 277	1	2
DOL				440 - 480	1	2
DOL				550 - 600	1	2
DOL				110 - 120	3	3
DOL				220 - 240	3	3
DOL				440 - 480	3	3
DOL				550 - 600	3	3
Temp. rating of wire						
		Temperature rating (°C)	Current (A)		Text	
		75			-- --	
General Use						
AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series	
AC	277	200	1	1	1	
AC	600	200	1	2	1	
AC	600	200	3	3	1	
GENERAL TECHNICAL INFORMATION						
Size of conductor						
composition of conductor	Min. / Max. value	No. of conductor per terminal	Cross section (mm²) or (AWG/kcmil)		Material of the wire	
solid wire	Min.	1	6mm²		Copper	
flexible wire	Max.	1	70mm²		Copper	
flexible wire	Min.	1	16mm²		Copper	
flexible wire	Max.	1	AWG 2/0		Copper	
Single-core or stranded wire	Max.	1	95mm²		Copper	
Single-core or stranded wire	Max.	1	AWG 3/0		Copper	
flexible wire with sleeve	Max.	1	70mm²		Copper	
flexible wire with ferrule according to DIN 46228	Min.	1	10mm²		Copper	
Stripping length						
			Length (mm) --			
						
Recommended screw driver						
Type of screw driver	Value					
Hex key	5					
Tightening torque of screws						
			tightening torque (Nm)		tightening torque (lb-in)	
			14		125	
Approbations						
Specification						Marking
EAC						
CE marking						
UK Directives						
CSA C.22.2 No.14						
GB/T14048.3						
General Information						
Text						
- FMC Note: This device is suitable for use in environment A and B						

General Information

Text

- Do not lubricate or treat contacts.
- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.
- Use copper wire only. Do not coat the wire end with tin.
- Terminals with factory fitted jumper links are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.

Waste Electrical & Electronic Equipment (WEEE)

Picture name	Description
	Do not throw in the trash as care must be taken to ensure environmentally sound disposal and recycling. Please either use an environmentally friendly waste disposal company; return to the supplier for disposal; or return direct to the manufacturer, Kraus & Naimer. You can find local Kraus & Naimer offices at www.krausnaimer.com

Proposition 65

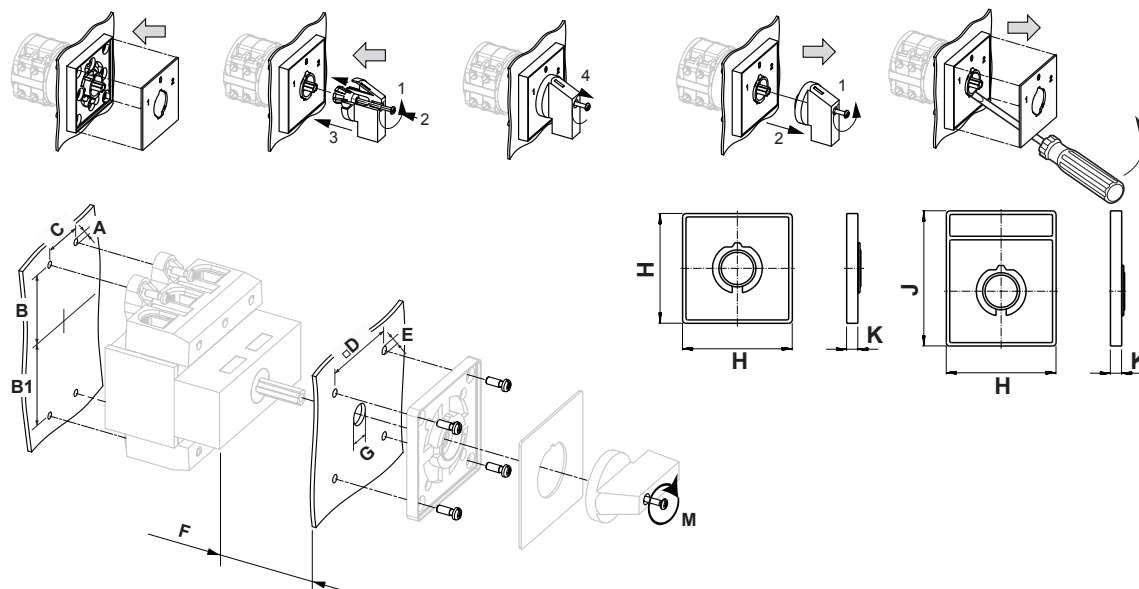
Picture name	Description
	WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov .

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

Mounting-VE

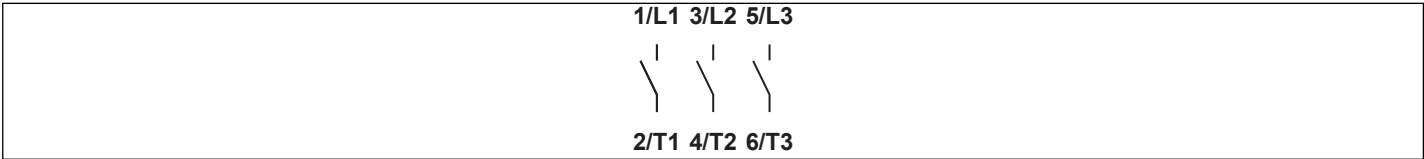


IP - Code front side	IP40
Stages	1,00 - 5,00
A	Ø 6,40 mm
B	H 59,00 - 61,00 mm
B1	H 59,00 - 61,00 mm
C	H 36,00 mm
D	□ 68,00 mm
E	Ø 6,00 mm
F	H ≤ 16,00 mm
G	Ø 13,00 - 17,00 mm
H	H 88,00 mm
J	H 124,00 mm
K	H 8,50 mm
M	M̄ 1,20 Nm



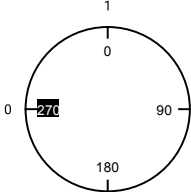
Wiring diagram

KG160.T303.VE



Switch program

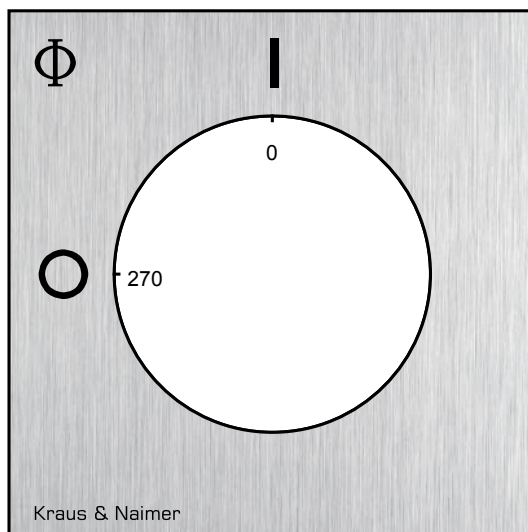
KG160.T303.VE

 Kraus & Naimer		KG160		T303		Page 1 of 1			
Face Plate 		1/L1 1	3/L2 3	5/L3 5	7	9	11	13	15
									
Switching Angle 90 Total switching Angle 90		2 2/T1	4 4/T2	6 6/T3	8	10	12	14	16
0	270								
1	0								
	90								
	180								

Version: 84

Face plate

S1.F456/A10.M1H



PADLOCK DEVICE

Designation: S2.V845/A11/B12

Face plate and handle unit: "A" face plate/alu, frame/black, handle/black, locking push rod/red

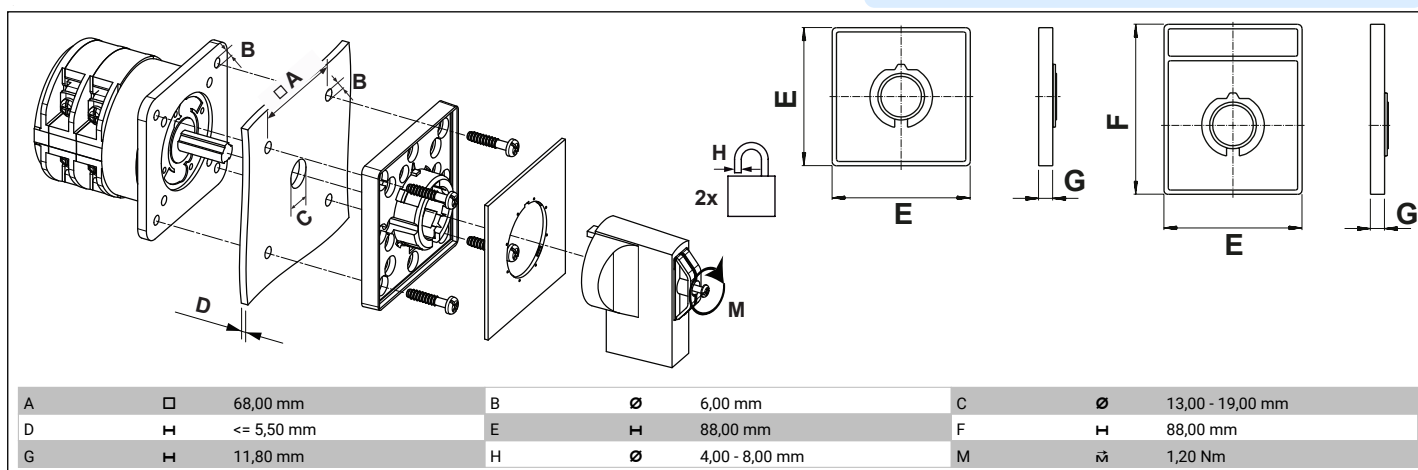
Locking position: "1" at 270°+90° - knockouts every 45°

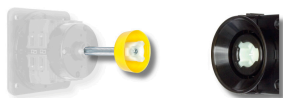
Angular displacement: "1" 1 x 90°

Type of mounting: "B" for type of mounting VE

Type of version: "1" for same switch size

Switch type: "2" for KA-, KG- and KH(R)-switches





Sample image

STANDARD DOOR CLUTCH

with shaft extension/asymmetric profile (with arresting screw)

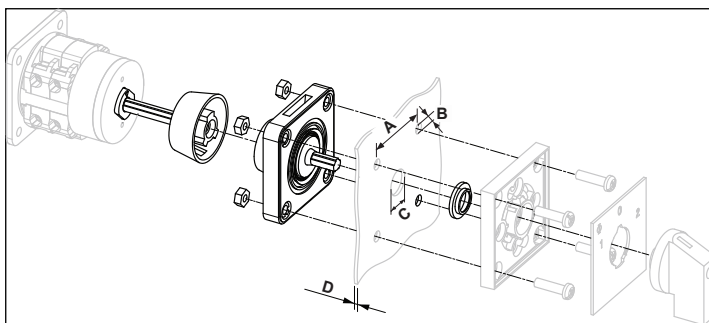
Designation: S2.M280E/B21S-EF

Type of interlock: "B2" with protected profile and interlock by door clutch

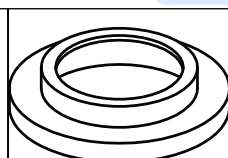
Shaft length: "1" 60 - 90 mm

Application: "S" for type of mounting VE

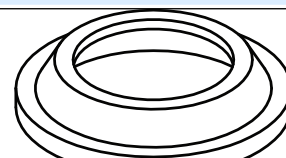
Type of version: "-EF" splash proof (IP66/67)



A	□	68,00 mm	B	∅	6,00 mm	C	∅	26,00 - 30,00 mm
D	H	5,50 mm						

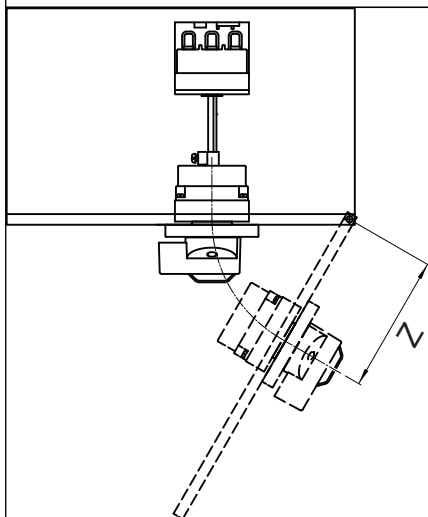


S2D V840 10

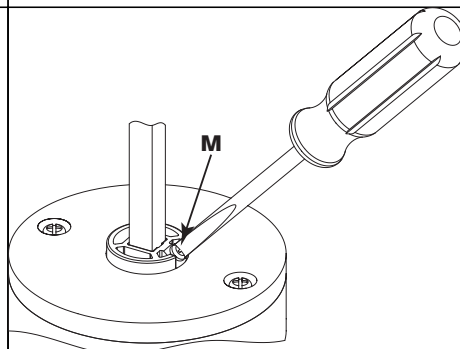


S3D V840 10

If S2 V840D or S2/S3 V845 will be applied with M280D, M280E or M280F, separately delivered parts S2D V840 10 resp. S3D V840 10 are not needed.



Z	H	>= 110,00 mm		
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M $\vec{M}$ 0,80 Nm

1. Loosen the screw
2. Move shaft
3. Tighten the screw



Sample image

AUXILIARY CONTACTS

for KG125-KG317 - ON/OFF Switches

Designation: K3A.M510B/11A-B

Number of NO-contacts: "1" total number of NO/NC-contacts max. 8 contacts

Number of NC-contacts: "1" total number of NC/NO-contacts max. 8 contacts

Version: "A" Standard (silver)

Type of mounting: "-B" for type of mounting VE

IEC 60947-3 EN 60947-3, VDE 0660 Teil 107

Rated insulation voltage Ui

Voltage (V) AC / DC
690 AC

Rated uninterrupted current Iu/Ith

Current (A)	Ambient temperature (°C)	Peak temperature (°C)	additional requirements
16	55	60	Ambient temperature +55°C during 24 hours with peaks up to +60°C

Rated operational current Ie

Utilization category	Voltage (V)	Current (A)
AC-15	110 - 120	6
AC-15	220 - 240	5
AC-15	380 - 440	4
AC-15	500	1,50
AC-21A	20 - 690	16

Max. Fuse rating IEC

Fuse characteristic	No. of Fuses	Current (A)
gG	1	16

UL60947-4-1, UL508

Nominal Voltage

Voltage (V) AC / DC
600 AC

Rated insulation voltage Ui

Voltage (V) AC / DC
600 AC

Rated thermal current

Current (A)	Ambient temperature (°C)	Additional Text
10	0 - 40	-

Pilot duty rating code

Duty Code
A600

Temp. rating of wire

Temperature rating (°C)	Current (A)	Text
75	-	-

General Use

AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series
AC	600	10	1	1	1

GENERAL TECHNICAL INFORMATION

Size of conductor

composition of conductor	Min. / Max. value	No. of conductor per terminal	Cross section (mm²) or (AWG/kcmil)	Material of the wire
solid wire	Min.	1	0.5mm²	Copper
solid wire	Min.	2	0.5mm²	Copper
flexible wire	Min.	1	0.75mm²	Copper
flexible wire	Min.	2	0.75mm²	Copper
flexible wire	Max.	2	2.5mm²	Copper
flexible wire	Max.	2	AWG 14	Copper
Single-core or stranded wire	Max.	2	AWG 12	Copper
Single-core or stranded wire	Max.	2	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Max.	2	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	1	0.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	2	0.5mm²	Copper

Stripping length

Length (mm) --



Recommended screw driver

Type of screw driver	Value
Slot screwdriver according to DIN 5264	0,8x4



Recommended screw driver		
Type of screw driver	Value	
Cross Screwdriver	PH1	
Tightening torque of screws		
	tightening torque (Nm)	tightening torque (lb-in)
	0,60	5
Approbations		
Specification	Marking	
EAC		
General Information		
Text		
- Do not lubricate or treat contacts. - Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology. - Use copper wire only. Do not coat the wire end with tin.		
13 21  14 22		