

General Description

Emergency Stop stations are designed and installed primarily to provide machine operators with a means of shutting down in the event of a dangerous occurrence taking place.



All electrical machines must now be installed with Emergency Stops fitted and specific International Regulations apply to the design, testing and installation of such devices. (IEC/EN60204-1)

The following pages contain the following options:-

- Enclosure formats - Moulded, Polyester, Die-cast Aluminium, Stainless Steel, Flush Mounting & Sheet steel.
- 'Reset' Methods - Twist-to-Reset, Pull-to-Reset & Key Reset
- Protection Devices - Raised Shroud & Flap Cover

Moulded IP65

Catalogue No.	EMS/TNS/PS/CO	ND
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- Actuator Emergency Stop, twist-to-reset.
- Legend None
- Contacts 1N/C+1N/O (ET-10A)
- Dims. 'D1'



Catalogue No.	EMS/T/PS/CO	ND
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- Actuator Emergency Stop twist-to-reset.
- Legend 'Emergency Stop' yellow anti-lock collar.
- Contacts 1N/C+1N/O (ET-10A)
- Dims. 'D1'



Catalogue No.	EMS/TS/PS/CO	ND
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- Actuator Emergency Stop twist-to-reset.
- Guard Raised shroud
- Legend None
- Contacts 1N/C+1N/O (ET-10A)
- Dims. 'D1'



Catalogue No.	EMS/K/PS/CO	ND
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- Actuator Emergency Stop key reset (supplied with 2 keys)
- Legend 'Emergency Stop' yellow anti-lock collar.
- Contacts 1N/C+1N/O (ET-10A)
- Dims. 'D1'



Catalogue No.	EMS/T/P/NC	ND
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- Actuator Emergency Stop, twist-to-reset.
- Legend Circular yellow
- Contacts 1N/C (MT-16A)
- Dims. 'D2'



Catalogue No.	EMS/TS/P/NC	ND
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- Actuator Emergency Stop twist-to-reset.
- Legend Circular yellow
- Guard Raised shroud
- Contacts 1N/C (MT-16A)
- Dims. 'D2'



Moulded Contd. IP65

Catalogue No.	EMS/K/P/NC	ND
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- Actuator Emergency Stop key reset. (Supplied with 2 keys)
- Legend 'Emergency Stop' yellow anti-lock collar.
- Contacts 1N/C (MT-16A)
- Dims. 'D2'



Catalogue No.	EMS/KS/P/NC	ND
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- Actuator Emergency Stop key reset. (Supplied with 2 keys)
- Guard Raised shroud
- Legend Circular yellow
- Contacts 1N/C (MT-16A)
- Dims. 'D2'



Glass Filled Polyester IP65

Catalogue No.	EMSH/T/GP/CO	HD
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- Actuator Mushroom, twist-to-reset.
- Legend Circular yellow
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D4'



Catalogue No.	EMSH/P/GP/CO	HD
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- Actuator Mushroom, pull-to-reset.
- Legend Circular yellow
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D4'



Catalogue No.	EMSH/K/GP/CO	HD
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- Actuator Mushroom, key reset. (Supplied with 2 x DC800 keys, differs available)
- Legend Circular yellow
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D4'



Catalogue No.	EMSH/P/F1/GP/CO	HD
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- Actuator Mushroom, pull-to-reset.
- Guard Padlocking flap cover
- Legend Printed flap cover
- Contacts 1N/O+1N/C (MT-16A)
- Dims. 'D4'



Die-cast Aluminium IP65

Catalogue No.	EMS/T/MG/NC	ND
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- Actuator Emergency Stop twist-to-reset.
- Legend Printed collar
- Contacts 1N/C (MT-16A)
- Dims. 'D5'



Catalogue No.	EMS/TS/MG/NC	ND
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- Actuator Emergency Stop, twist-to-reset.
- Guard Raised shroud
- Legend Circular yellow
- Contacts 1N/C (MT-16A)
- Dims. 'D5'



Catalogue No.	EMS/K/MG/NC	ND
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- Actuator Emergency Stop, key reset. (Supplied with 2 keys)
- Legend Printed collar
- Contacts 1N/C (MT-16A)
- Dims. 'D5'



Catalogue No.	EMS/KS/MG/NC	ND
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- Actuator Emergency Stop, key reset. (Supplied with 2 keys)
- Guard Raised shroud
- Legend Circular yellow
- Contacts 1N/C (MT-16A)
- Dims. 'D5'



Die-cast Aluminium Contd. IP65

Catalogue No. EMSH/T/MG/CO HD

- Actuator Mushroom, twist-to-reset.
- Legend Circular yellow
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/P/MG/CO HD

- Actuator Mushroom, pull-to-reset.
- Legend Circular yellow.
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/P/MR/CO HD

- Actuator Mushroom, pull-to-reset.
- Legend Circular yellow.
- Finish Red
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/K/MG/CO HD

- Actuator Mushroom, key reset. (Supplied with 2 x DC800 keys, differs available)
- Legend Circular yellow.
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/K/MR/CO HD

- Actuator Mushroom, key reset. (Supplied with 2 x DC800 key, differs available)
- Finish Red
- Legend Circular yellow.
- Contacts 1N/C+1N/O (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/P/F1/MG/CO HD

- Actuator Mushroom, pull-to-reset.
- Guard Padlocking flap cover
- Legend Printed flap cover
- Contacts 1N/O+1N/C (MT-16A)
- Dims. 'D5'



Catalogue No. EMSH/P/F1/MR/CO HD

- Actuator Mushroom, pull-to-reset.
- Guard Padlocking flap cover
- Finish Red
- Legend Printed flap cover
- Contacts 1N/O+1N/C (MT-16A)
- Dims. 'D5'



Stainless Steel IP65

Catalogue No. EMS/T/SS/NC ND

- Actuator Emergency Stop twist-to-reset.
- Legend Printed collar
- Finish Brushed
- Lid fixings Security style screws.
- Contacts 1N/C (MT-16A)
- Dims. 'D9'



Catalogue No. EMS/K/SS/NC ND

- Actuator Emergency Stop, key reset. (Supplied with 2 keys)
- Lid fixings Security style screws.
- Finish Brushed
- Legend Printed collar
- Contacts 1N/C (MT-16A)
- Dims. 'D9'



Stainless Steel Contd. IP69K

Catalogue No.	EMS/T/SS/NC69	ND
• Actuator Emergency Stop twist-to-reset. • Legend Yellow circular. • Sealing IP69K. • Finish Brushed • Lid fixings Security style. • Contacts 1N/C+safety contact (Type MTOSF see page 16) • Dims. 'D10'		Sealed to withstand the forces associated with pressure washers. Tested to withstand a hose delivering water at a pressure between 80-100 bar at a temperature of 80°C. The combination of a stainless steel enclosure and sealing to IP69K make these items ideally suited to environments where strict hygiene cleaning routines are enforced. Supplied with external fixing feet for vertical or horizontal mounting.

Flush Mounting IP65

As supplied there is an IP65 seal between the Pushbutton and the face plate. To maintain this seal when installing the complete assembly the onus is upon the installer to use a continuous bead of flexible sealant to provide an effective seal between the rear of the face plate and what may be an uneven mounting surface.

Catalogue No.		EMS/T/F/CO	ND	Catalogue No.		EMS/K/F/CO	ND
• Actuator • Legend • Lid fixings • Contacts • Dims.	Emergency Stop twist-to-reset. Printed Collar Security style 1N/C+1N/O (ET-10A) 'D11'			• Actuator • Legend • Lid fixings • Contacts • Dims.	Emergency Stop, key reset.(Supplied with 2 keys) Printed collar Security style 1N/C+1N/O (ET-10A) 'D11'		

Catalogue No.	EMSH/T/F/CO	HD	Catalogue No.	EMSH/P/F/CO	HD
• Actuator • Legend • Lid fixings • Contacts • Dims.	Mushroom, twist-to-reset. Yellow circular. Security style 1N/C+1N/O (MT-16A) 'D11'		• Actuator • Legend • Lid fixings • Contacts • Dims.	Mushroom, pull-to-reset. Yellow circular. Security style 1N/C+1N/O (MT-16A) 'D11'	

Catalogue No.	EMSH/K/F/CO	HD	Catalogue No.	EMSH/P/F1/F/CO	HD
• Actuator Mushroom, key reset. (Supplied with 2 x DC800 keys, differs available) • Legend Circular yellow. • Contacts 1N/C+1N/O (MT-16A) • Dims. 'D11'		• Actuator Mushroom, pull-to-reset. • Guard Padlocking flap cover • Legend Pad printed flap cover • Contacts 1N/O+1N/C (MT-16A) • Dims. 'D11'			

Sheet Steel

Catalogue No.	EMS/T/FS/NC	ND
• Actuator Emergency Stop, twist-to-reset. • Fitting Pattress box or trucking as shown:- • Contacts 2xN/C with 'faston' terminals (Monobloc-5A) • Dims. 'D8'		• Can be installed in dado trunking as shown.



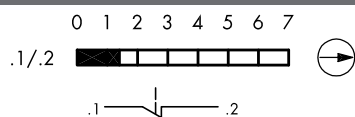
Accessories

Contact blocks are available to replace or extend the arrangements supplied as standard.

'MT' Series

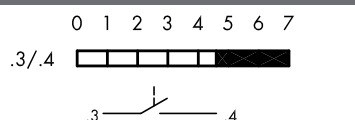
The 'MT' series are designed as 'clip-in' modules which can be supplied in N/O, N/C & safety formats. The clip-in housing allows for a total of three blocks per actuator.

Catalogue No. MTO



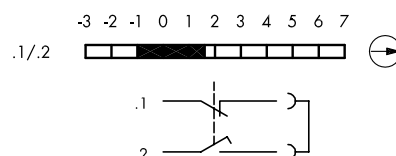
Normally Closed (N/C) contact block. Momentary action.

Catalogue No. MTI



Normally Open (N/O) contact block. Momentary action.

Catalogue No. MTOSF



'Safety Contact' for Emergency Stops. As MTO block but with an added contact which detects if the block becomes loose from its housing.

Occupies the space of two blocks.

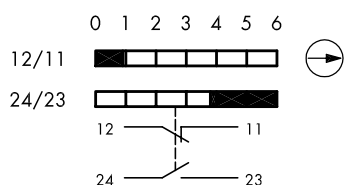
Electrical Ratings - BS EN 60947-5-1

	a.c.	d.c.
Utilisation Category	AC15 A600	DC13 Q600
Rated Insulation Voltage (Ui)	600V	600V
Rated Operational Voltage (Ue)	250V / 440V	440V / 250V / 125V / 60V / 24V
[Rated Operational Current (Ie)]	3A / 1.6A	0.12A / 0.2A / 0.4A / 1A / 2A
Breaking Capacity	10I _e	1.1I _e
Continuous thermal current (Ith)	16A	16A

'ET' Series

The 'ETR' block provides N/O + N/C contacts in one assembly.

Catalogue No. ETR



Contact Block, Momentary Action
1 N/O + 1 N/C

Electrical Ratings - BS EN 60947-5-1

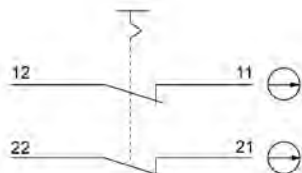
	a.c.	d.c.
Utilisation Category	AC15	DC13
Rated Insulation Voltage (Ui)	400V	400V
Rated Operational Voltage (Ue)	400V / 250V	400V / 250V / 125V / 60V / 24V
Rated Operational Current (Ie)	3A / 5A	0.12A / 0.2A / 0.4A / 1A / 2A
Breaking Capacity	10I _e	1.1I _e
Continuous thermal current (Ith)	10A	10A

i Accessories Contd.

'Monobloc'

The Monobloc assembly is designed for use in very restricted space. The contacts are assembled in the base of the actuator and cannot be supplied separately. To replace the contacts will require a new complete actuator.

Catalogue No. **FVRKOO**



Contact Block, Momentary Action 2 N/C

Electrical Ratings - BS EN 60947-5-1

	a.c.
Utilisation Category	AC15 B300
Rated Insulation Voltage (Ui)	250V
Rated Operational Voltage (Ue)	240V / 120V
Rated Operational Current (Ie)	1.5A / 3A
Breaking Capacity	10Ie
Continuous thermal current (Ith)	5A

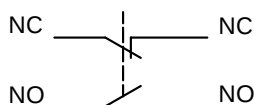
'S1' Series

The S1 contact block is designed to be stacked in pairs side-by-side and then back-to-back making a total on four changeover blocks on one Heavy Duty actuator. Three or four blocks will require extended fixing screws (U42)

Catalogue No. **S1**



Image shows
2 off S1 blocks



Contact Block, Momentary Action C/O

Electrical Ratings - BS EN 60947-5-1

	a.c.
Utilisation Category	AC15
Rated Insulation Voltage (Ui)	660V
Rated Operational Voltage (Ue)	400V
Rated Operational Current (Ie)	5A
Continuous thermal current (Ith)	10A

Catalogue No. **U42**

Assembly screw kit to enable 3 or 4 'S1' contacts to be mounted on a single Heavy Duty actuator.

Mechanical Endurance:-

All **HD** assemblies with the exception of Emergency Stops

HD Emergency Stop (Twist-to-reset & pull-to-reset)

All **ND** assemblies

1x10⁶ operations

0.25x10⁶ operations

1x10⁶ operations

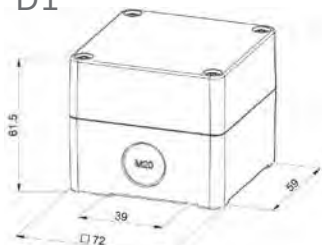
"Over 60 years experience in design and manufacture"



Dimensions

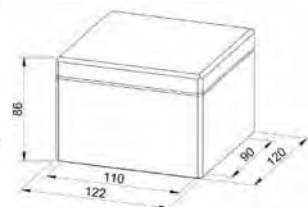
Dimensions as shown are for the enclosures only used in the various assemblies.
Projections will vary depending upon the actuators incorporated in the design - see foot of page.

D1



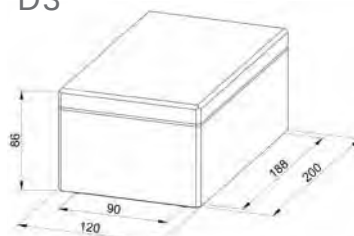
Material: Polycarbonate
Colour: Yellow/Black
Entries: 2xM20
Fixings: 2xM4

D2



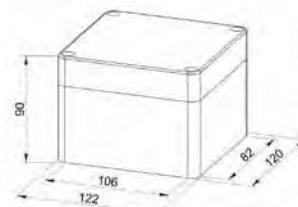
Material: Polycarbonate
Colour: Grey (RAL 7035)
Entries: Plain sides
Fixings: 4xM4

D3



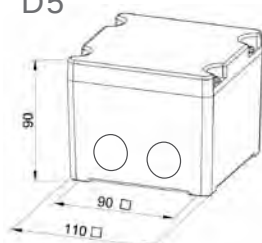
Material: Polycarbonate
Colour: Grey (RAL 7035)
Entries: Plain sides
Fixings: 4xM4

D4



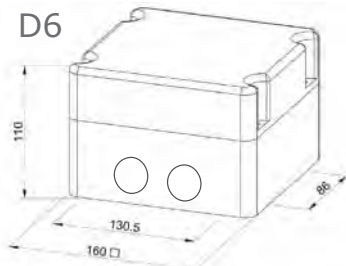
Material: Glass reinforced Polyester
Colour: Grey (RAL 7000)
Entries: Plain sides
Fixings: 4xM5

D5



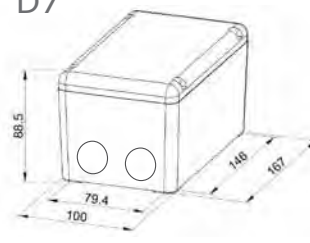
Material: Die-cast Aluminium
Colour: Grey (RAL 7035)
Red (RAL 3020)
Entries: 2xM20
Fixings: 4xM5

D6



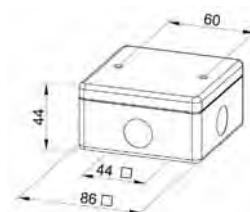
Material: Die-cast Aluminium
Colour: Grey (RAL 7035)
Entries: 2xM20
Fixings: 4xM5

D7



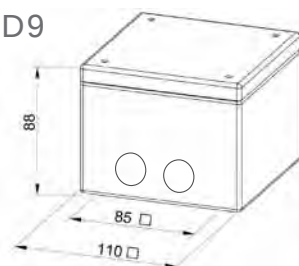
Material: Die-cast Aluminium
Colour: Grey (RAL 7035)
Entries: 2xM20
Fixings: 4xM5

D8



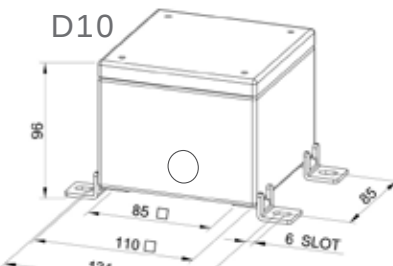
Material: Steel
Colour: Silver
Entries: 5xM20 knockouts
Fixings: 4 off 5x10 slots

D9



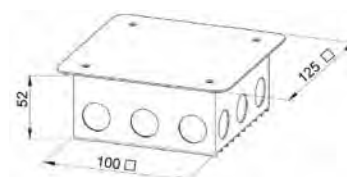
Material: Stainless steel (Grade 304)
Finish: Brushed
Entries: 2xM20
Fixings: 4xM6

D10



Material: Stainless steel (Grade 304)
Finish: Brushed
Entries: 1xM20
Fixings: 4xM6

D11



Material: Fascia plate - Stainless Steel
Back box - Galvanised steel
Fascia plate - Brushed
Entries: 9xM20 knockouts
Fixings: 4xM5

Actuator Projections

Normal Duty Actuators (ND)	Emergency Stop (incl. guards)	42mm
	Start/Stop	11mm

Heavy Duty Actuators (HD)	Mushroom (Twist or pull to reset)	43mm
	Mushroom (Key reset)	51mm
	Full guard (Start/Stop)	30mm
	Flap Cover	66mm