

Technical Data Sheet

Emergency Stop Control Station Range

CDPD90
Issue 5

Emergency Stop

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. Electrical machines often require Emergency Stops which are required to meet specific requirements and International standards (IEC/EN60204, BS EN ISO 13850, IEC 60947-5-1, IEC 60947-5-5). These standards were applied to the design, testing and installation of such devices offer by Craig & Derricott.

The following pages contain the following options:-

- Enclosure formats - PA / PC Plastic, Glass Filled Polyester, Die-cast Aluminium, Stainless Steel, Sheet Steel & Flush Mounting.
- Reset Methods - Twist-to-Reset, Pull-to-Reset & Key Reset
- Protection Devices - Raised Shroud & Flap Cover
- Actuators - Heavy (HD) & Normal Duty (ND)

Image	Description	Cat. No.
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating Emergency Stop, twist-to-reset None 1N/C (EMSL Base Mount) D12 PC/PA IP66, IP67 & IP69K	ND EMSL/TNS/PS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating Emergency Stop twist-to-reset Emergency Stop Circular yellow 1N/C (EMSL Base Mount) D12 PC/PA IP66, IP67 & IP69K	ND EMSL/T/PS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating Emergency Stop key reset (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Base Mount) D12 PC/PA IP66, IP67 & IP69K	ND EMSL/K/PS/NC
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating Emergency Stop twist-to-reset Emergency Stop Circular yellow Raised shroud 1N/C (EMSL Base Mount) D12 PC/PA IP66, IP67 & IP69K	ND EMSL/TS/PS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating Emergency Stop, twist-to-reset Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D2 PC IP65	ND EMSL/T/P/NC
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating Emergency Stop twist-to-reset None Raised shroud 1N/C (EMSL Lid Mount) D2 PC IP65	ND EMSL/TS/P/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating Emergency Stop key reset. (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D2 PC IP65	ND EMSL/K/P/NC

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Image	Description			Cat. No.
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop key reset. (2 Keys) None Raised shroud 1N/C (EMSL Lid Mount) D2 PC IP65	ND	EMSL/KS/P/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop twist-to-reset Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D5 Die-cast Aluminium IP65	ND	EMSL/T/MG/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop key reset (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D5 Die-cast Aluminium IP65	ND	EMSL/K/MG/NC
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop twist-to-reset None Raised Shroud 1N/C (EMSL Lid Mount) D5 Die-cast Aluminium IP65	ND	EMSL/TS/MG/NC
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop key reset (2 Keys) None Raised Shroud 1N/C (EMSL Lid Mount) D5 Die-cast Aluminium IP65	ND	EMSL/KS/MG/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop, twist-to-reset Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D0 Die-cast Aluminium IP65	ND	EMSL/T/MGS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop, key reset (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D0 Die-cast Aluminium IP65	ND	EMSL/K/MGS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop, key reset (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D0 Die-cast Aluminium IP65	ND	EMSL/K/MRS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop, twist-to-reset Emergency Stop printed yellow collar 1N/C (EMSL Lid Mount) D9 Stainless Steel IP65	ND	EMSL/T/SS/NC

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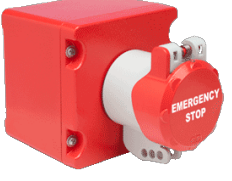





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Image	Description			Cat. No.
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop key reset (2 Keys) Emergency Stop printed yellow collar 1N/C (EMSL Lid Mount) D9 Stainless Steel IP65	ND	EMSL/K/SS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop twist-to-reset Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D11 Stainless Steel IP65	ND	EMSL/T/F/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop key reset (2 Keys) Emergency Stop Circular yellow 1N/C (EMSL Lid Mount) D11 Stainless Steel IP65	ND	EMSL/K/F/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop, twist-to-reset Emergency Stop circular yellow 1N/C + safety contact (EMSL Lid Mount) D10 Stainless Steel IP69K	ND	EMSL/T/SS/NC69
EMSL/T/SS/NC69 is 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.				
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom twist-to-reset Pattress box or trucking 2xN/C with 'faston' terminals (Monobloc-5A) D8 Sheet Steel IP65	ND	EMS/T/FS/NC
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD	EMSH/P/MG/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD	EMSH/P/MR/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom twist-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD	EMSH/T/MG/CO

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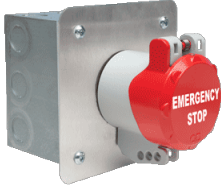
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Image	Description		Cat. No.
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom key reset (2 Keys) Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD EMSH/K/MG/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom key reset (2 Keys) Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD EMSH/K/MR/CO
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop printed flap cover Padlocking flap cover 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD EMSH/P/F1/MG/CO
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop printed flap cover Padlocking flap cover 1N/C+1N/O (MT-16A) D5 Die-cast Aluminium IP65	HD EMSH/P/F1/MR/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom twist-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D4 Glass Filled Reinforced Polyester IP65	HD EMSH/T/GP/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D4 Glass Filled Reinforced Polyester IP65	HD EMSH/P/GP/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom key reset (2 Keys) Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D4 Glass Filled Reinforced Polyester IP65	HD EMSH/K/GP/CO
	Actuator Legend Guard Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset Emergency Stop printed flap cover Padlocking flap cover 1N/C+1N/O (MT-16A) D4 Glass Filled Reinforced Polyester IP65	HD EMSH/P/F1/GP/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom twist-to-reset Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D11 Stainless Steel IP65*	HD EMSH/T/F/CO

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Image	Description		Cat. No.
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset HD Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D11 Stainless Steel IP65*	EMSH/P/F/CO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom key reset (2 Keys) HD Emergency Stop circular yellow 1N/C+1N/O (MT-16A) D11 Stainless Steel IP65*	EMSH/K/F/CO
	Actuator Legend Guard Emergency Stop pad printed flap cover Contacts Dimensions Enclosure Material IP Rating	Emergency Stop Mushroom pull-to-reset HD Padlocking flap cover Emergency Stop pad printed flap cover 1N/C+1N/O (MT-16A) D11 Stainless Steel IP65*	EMSH/P/F1/F/CO

*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.

General Description


'Emergency Stops' are often situated adjacent to the associated 'Start' button. In these assemblies the two functions are combined in a single enclosure. All of the stayput 'Emergency Stop' buttons meet the latest safety requirements. The flap cover option operates the stayput actuator when the cover is pressed. Padlocks can be inserted to prevent an unauthorised reset. Enclosures in polycarbonate and die-cast aluminium provide a choice dependent upon the environment.

Image	Description		Cat. No.
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	a/ Start, momentary ND b/ Emergency Stop, twist-to-reset a/ I b/ Emergency Stop Circular yellow 1N/C+1N/O (EMSL Lid Mount) D7 Die-cast Aluminium IP65	ESSL/GS/T/MG/NO
	Actuator Legend Contacts Dimensions Enclosure Material IP Rating	a/ Start, momentary ND b/ Emergency Stop, twist-to-reset a/ I b/ Emergency Stop Circular yellow 1N/C+1N/O (EMSL Lid Mount) D3 Moulded Plastic IP65	ESSL/GS/T/P/NO
	Actuator Legend Guard Padlocking flap cover Emergency Stop printed flap cover Contacts Dimensions Enclosure Material IP Rating	a/ Start, momentary HD b/ Emergency Stop, pull-to-reset a/ Start b/ Emergency Stop Printed flap cover Padlocking flap cover 1N/C+1N/O (MT-16A) D7 Die-cast Aluminium IP65	SSTH/GS/P/F1/MG/CO

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





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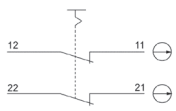
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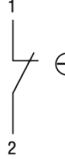


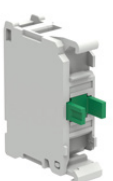

Image	Description		Cat. No.
	Actuator	a/ Start, momentary b/ Emergency Stop, mushroom pull-to-reset	HD
	Legend	a/ Start b/ Emergency Stop Circular yellow	ESSH/GS/P/MG/CO
	Contacts	1N/C+1N/O (MT-16A)	
	Dimensions	D7	
	Enclosure Material	Die-cast Aluminium	
	IP Rating	IP65	

Accessories

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

MT Series			
A 'clip-in' module which can be supplied in N/O, N/C & safety formats. The clip-in housing allows for a total of three blocks per actuator.			
Image	Description		Cat. No.
	Normally Closed (N/C) contact block. Momentary action. 0 1 2 3 4 5 6 7 .1/.2   .1  .2		MTO
	'Safety Contact' for Emergency Stops.		MTOSFE
	Normally Open (N/O) contact block. Momentary action. 0 1 2 3 4 5 6 7 .3/.4   .3  .4		MTI

Monobloc Series			
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.			
Image	Description		Cat. No.
	Contact Block, Momentary Action 2 N/C 		FRVKOO

EMSL Series							
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.							
Image	Description		Cat. No.	Image	Description		Cat. No.
	Base mounted normally closed contact block • Screw termination • Direct snap-on mounting to control station base • Maximum tightening torque for screw terminals: 1Nm		1  2 EMSL/NC		Lid mounted normally closed contact block • Screw termination • Direct snap-on mounting to control station actuator • Maximum tightening torque for screw terminals: 1Nm		1  2 CB1NC
	Base mounted normally open contact block • Screw termination • Direct snap-on mounting to control station base • Maximum tightening torque for screw terminals: 1Nm		3  4 EMSL/NO		Lid mounted normally open contact block • Screw termination • Direct snap-on mounting to control station actuator • Maximum tightening torque for screw terminals: 1Nm		3  4 CB1NO

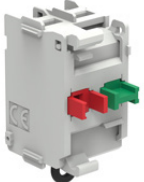
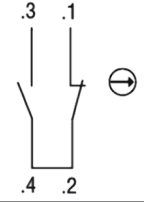
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Accessories

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

Image	Description	Cat. No.
	<p>Lid mounted normally closed safety contact block available for Emergency Stop control stations. When inserted the Red plunger will be operated by the pushbutton actuator, the green plunger will retain a N/C contact when the block is pushed fully home and clicked in-place. Should for any reason the block become loose, the contact under the green plunger will open and initiate a stop function.</p> <ul style="list-style-type: none"> • Screw termination • Direct snap-on mounting to control station actuator • Maximum tightening torque for screw terminals: 1Nm 	 <p>CB01NCSM</p>

Technical Specification - Control Stations

Data supplied against tests to BS EN 60947-5-1

Series	Current	Utilisation Category	Rated Insulation Voltage (U_i)	Rated Operational Voltage (U_e) / Current (I_e)										Breaking Capacity	Continuous thermal current (I_{th})
				V	-	-	-	-	250	440	-	-	-		
MT	a.c.	AC15 A600	600V	V	-	-	-	-	250	440	-	-	-	10Ie	16A
				A	-	-	-	-	3	1.6	-	-	-		
	d.c.	DC13 Q600	600V	V		24	60	125	250	440				1.1Ie	16A
				A		2	1	0.4	0.2	0.12					
Mono bloc	a.c.	AC15 B300	250V	V	-	-	-	120	240	-	-	-	-	10A	
				A	-	-	-	5	5	-	-	-			-
EMSL	a.c.	AC15	690V	V	12	24	48	120	240	400	480	500	600	10Ie	10A
				A	6	6	6	6	6	3	1.5	1.4	1.2		
	d.c.	DC13	690V	V	12	24	48	125	250	440	-	500	600	1.1Ie	10A
				A	3	3	1.5	0.55	0.27	0.15	-	0.13	0.1		

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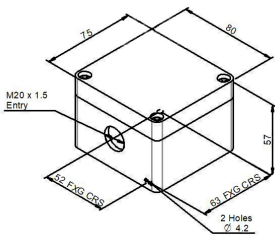
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Control Stations

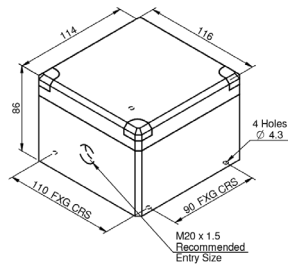
Dims as shown are for the enclosures only used in the various assemblies. Projections will vary depending upon the actuators incorporated in the design.

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

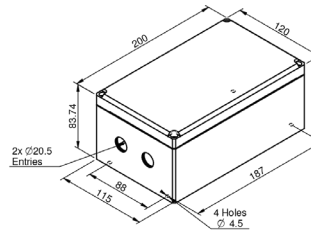
Heavy Duty Actuators (HD)	Mushroom (Twist or pull to reset)	43mm
	Mushroom (Key reset)	51mm
	Full guard (Start/Stop)	30mm
	Flap Cover	66mm



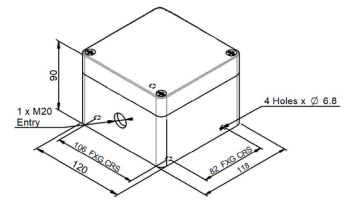
Enclosure D0
Material Die-Cast Aluminium
Colour Grey (RAL 7001)
Entries 1 x M20
Fixings 2 x M4



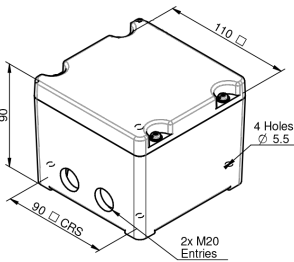
Enclosure D2
Material Polycarbonate
Colour Grey (RAL 7035)
Entries Plain sides
Fixings 2 x M4



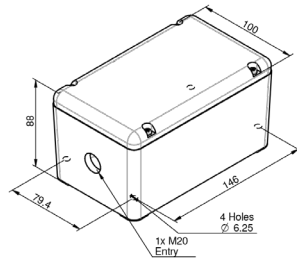
Enclosure D3
Material Polycarbonate
Colour Grey (RAL 7035)
Entries Plain sides
Fixings 4 x M4



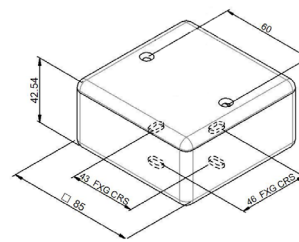
Enclosure D4
Material Glass reinforced Polyester
Colour Grey (RAL 7001)
Entries 1 x M20
Fixings 4 x M5



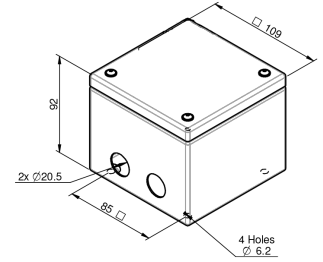
Enclosure D5
Material Die-Cast Aluminium
Colour Grey (RAL 7035)
Red (RAL 3020)
Entries 2 x M20
Fixings 4 x M5



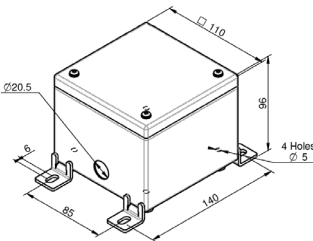
Enclosure D7
Material Die-Cast Aluminium
Colour Grey (RAL 7035)
Entries 1 x M20
Fixings 4 x M5



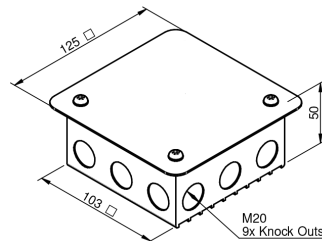
Enclosure D8
Material Steel
Colour Silver
Entries 5 x M20 knockouts
Fixings 4 off 5 x 10 slots



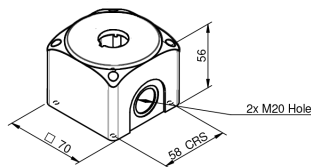
Enclosure D9
Material Stainless Steel (Grade 304)
Colour Brushed
Entries 2 x M20
Fixings 4 x M6



Enclosure D10
Material Stainless Steel (Grade 304)
Colour Brushed
Entries 1 x M20
Fixings 4 x M6



Enclosure D11
Material Fascia Plate - Stainless Steel
Back Box - Galvanised Steel
Colour Fascia Plate - Brushed
Entries 9 x M20 knockouts
Fixings 4 x M5



Enclosure D12
Material Polycarbonate
Colour Yellow/Black
Entries 2 x M20/M25/PG13.5/PG16
2 x M16/PG11
Fixings 4xM4