

c3controls offers the most rugged, dependable Disconnect Switches that money can buy. From Panel/Base Mount to Door Mount with switch ratings from 16A - 125A, we've got what you need. And, of course, they're all certified to UL and CSA standards and CE marked for global versatility.

# Non-Fused DISCONNECT SWITCHES

Series DS2 IEC Non-Fused 12
Disconnect Switches

Accessories 15

Specifications 16

Dimensions 17

See Enclosed Disconnects 2'



NOTE: The scope (range, description, price, specifications, dimensions, etc.) of the product featured in this section is subject to change without notice. Refer to www.c3controls.com for product updates.

#### Conformity to Standards:

UL 508

CSA C22.2 No. 14 IEC 60947-1, 60947-3

#### Certifications:

UL File #: E187641 (Guide NLRV2, NLRV7, NLRV8, NLRV) CSA File #: 232541 CE Marked (per EU Low Voltage Directive 2006/95/EC and 93/68/EEC)









#### 'T'S EASY TO BUILD YOUR OWN DISCONNECT SWITCH

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

#### **Series DS2 Disconnect Switches (Non-Fused)**

Example: To build one of our most popular Disconnect Switches, the part number would be I + DS2 + III + IV + V + VI + VII

or DDS2-325-DHGRY			
I. INSTALLATION			
CODE	DESCRIPTION	PRICE	
D	Door Mount	\$13.50	
P	Panel/Base Mount	\$15.00	

### II. BASIC DISCONNECT SWITCH

OFENATOR		
CODE	DESCRIPTION	
DS2	Non-Fused Disconnect Switch	

#### III. NUMBER OF POWER POLES

IV. CURRENT RATING					
CODE		3	4	5	
	DESCRIPTION	3 Poles	4 Poles	5 Poles	
16	16 Amp	\$ 0.00	\$ 7.00	\$14.00	
25	25 Amp	\$ 2.00	\$ 9.00	\$16.00	
30	32 Amp	\$ 5.25	\$13.25	\$21.25	
40	40 Amp	\$ 7.00	\$15.50	\$24.00	
60	63 Amp	\$10.00	\$19.50	\$29.00	
80	80 Amp	\$19.00	\$30.00	\$41.00	
100	100 Amp	\$21.00	\$32.50	\$44.00	
125	125 Amp	\$26.00	\$38.00	\$50.00	

V. OPERATING HANDLE TYPE					
CODE	DESCRIPTION	FOR CURRENT RATING CODES	PRICE		
	DOOR MOUNT HANDLES FOR DOOR MOUNT SWITE	CHES			
MDHG	Padlockable Lever (IP55)	16	\$ 4.50		
MSDHG	Padlockable Lever - Single Hole (22.5mm) Mounting (IP55)	16	\$ 4.50		
DHM	Round (Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)	25 ~ 60	\$15.50		
DHG	Round (Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)	25 ~ 125	\$ 5.25		
	DOOR MOUNT HANDLES FOR PANEL/BASE MOUNT SV	VITCHES			
MPHG	Padlockable Lever (IP65)	16	\$ 4.50		
PHM	Round (Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)	25 ~ 125	\$15.50		
PHG	Round (Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)	25 ~ 125	\$ 5.25		
SPH	Short Pistol (IP65)	25 ~ 125	\$20.00		
LPH	Long Pistol (IP65)	80 ~ 125	\$25.00		
	INTEGRAL HANDLES FOR PANEL/BASE MOUNT SWITCHES				
SML	Lever (IP30)	25 ~ 60	\$ 4.00		
SMP	Padlockable Lever (IP30)	25 ~ 60	\$ 4.50		

VI. OPERATING HANDLE COLOR					
CODE	OPERATOR COLOR	BEZEL COLOR	FOR OPERATOR TYPE CODE		
RY	Red	Yellow	DHM, DHG, PHM, PHG, MDHG, MSDHG, MPHG, SMP		
GB	Grey	Black	DHM, PHM		
ВВ	Black	Black	DHM, PHM		
BG	Black	Grey	DHM, DHG, PHM, PHG, MDHG, MSDHG, MPHG		
ВА	Black	Aluminum	SML		
BN	Black	_	SPH, LPH		

VII. OPERATING SHAFT LENGTH					
CODE	CODE DESCRIPTION FOR CURRENT RATING CODES PRICE				
(Blank)	Door Mount and Panel/Base Mount Switch with Integral Operating Handle	_	_		
06	150mm (5-57/64") Operating Shaft for Panel/Base Mount Switch	16	\$ 2.50		
11	283mm (11") Operating Shaft for Panel/Base Mount Switch	25 ~ 125	\$ 3.25		







DOOR MOUNT DISCONNECT SWITCH WITH DHG HANDLE



PANEL MOUNT
DISCONNECT SWITCH
WITH INTEGRAL
SMP HANDLE



PANEL MOUNT
DISCONNECT SWITCH
WITH INTEGRAL
SML HANDLE



## SERIES DS2 IEC Non-Fused DISCONNECT SWITCHES

Our Series DS2 IEC Non-Fused Disconnect Switches provide superior performance in rugged applications and are certified as Manual Motor Controllers Suitable as Motor Disconnects for motors up to 40HP at 480V (45kW at 400V). Panel/Base and door mounting options allow switches to be installed in virtually any enclosure.

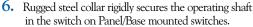
Panel/Base mount switches are simple to install:

- Snap-on to a 35mm DIN rail.
- Secure to the panel with two (2) fixing screws.
- Dual terminal markings (1/L1, 3/L2, 5/L3 and 2/T1, 4/T2, 6/T3) for fast and easy wiring.



## COMPACT SIZE WITH ROBUST DESIGN FEATURES FOR THE MOST DEMANDING DISCONNECTING APPLICATIONS.

- 1. 10kA short circuit rating at 600V AC with Class J and Class CC fuses.
- 2. Positive drive to open double break contacts to ensure circuit isolation.
- 3. Compact space saving design for reduced size control panels. 16A switch is only 43mm (1-11/16") wide and our  $25A \sim 63A$  switches are only 50mm (1-31/32") wide.
- **4.** Wide variety of operating handle styles and colors with Type 1, 2, 3, 3R, 4/4X, 12 and 13, IP55, and IP65 ingress protection ratings for the most demanding industrial environments.
- Glass filled polyamide thermoplastic housings are ARC track resistant and provide insulation between poles.





- 7. Line side terminal shield (provided as standard) and IP20 terminals guard against accidental contact with live parts.
- Integral captive terminal clamps are shipped in the backed-out position for easy wiring and are plated for corrosion resistance.
- Auxiliary contacts, power poles, and neutral poles install on the left or right side of the switch.
- Complete assembled switches with operating handles are available for JIT manufacturing and reduced inventory.



### Some of Our Popular Configurations:

	SERIES DS2 IEC NON-FUSED DISCONNECT SWITCHES	
CATALOG NUMBER	DESCRIPTION	PRICE
DDS2-316-MDHGRY	16A Door Mount Disconnect Switch w /3 Poles and Lever Red/Yellow Handle	\$18.75
DDS2-325-DHGRY	25A Door Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$20.75
DDS2-330-DHGRY	32A Door Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$24.00
DDS2-340-DHGRY	40A Door Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$25.75
PDS2-316-MPHGRY06	16A Panel Mount Disconnect Switch w /3 Poles and Lever Red/Yellow Handle	\$22.00
PDS2-325-PHGRY11	25A Panel Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$25.50
PDS2-330-PHGRY11	32A Panel Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$28.75
PDS2-340-PHGRY11	40A Panel Mount Disconnect Switch w/3 Poles and Round Red/Yellow Handle	\$30.50
PDS2-325-SMLBA	25A Panel Mount Disconnect Switch w/3 Poles and Integral Black/Aluminum Lever Handle	\$21.00
PDS2-325-SMPRY	25A Panel Mount Disconnect Switch w/3 Poles and Integral Red/Yellow Padlockable Lever Handle	\$21.50
PDS2-330-SMLBA	32A Panel Mount Disconnect Switch w/3 Poles and Integral Black/Aluminum Lever Handle	\$24.25



# SERIES DS2 IEC Non-Fused Operating Handles

c3controls Series DS2 IEC non-fused disconnect switch operating handles are available in a wide variety of styles, colors, and ingress protection ratings — perfect for any application from light duty to severe industrial environments. External operating handles are easy to install in standard 4-hole panel drilling layouts. A single hole (22.5mm) operating handle is also available for 16A switches. Operating handles can be installed in enclosures with door thicknesses up to 5mm (3/16").









# Easy to install, stylish operating handles provide reliable actuation in disconnecting applications and can be locked off for extra safety.

- Handles can be padlocked OFF with up to three padlocks to meet global installation codes and standards requirements.
- 2. Operating handles with ON/OFF and I/O markings.
- 3. Door interlock can only be opened in the OFF position.
- **4.** Positive, reliable actuation of the switch is ensured through the rigid operating shaft that can be cut to length for enclosure depths up to 204mm (8") for 16A switches and up to 355mm (13-63/64") for 25A  $\sim$  63A switches and 456.5mm (17-63/64") for 80A  $\sim$  125A switches.
- 5. Pistol operating handles include a concealed "defeater mechanism" that must be operated with a tool. Allows entry into the enclosure with the switch in the ON position.



DHG/PHG
DOOR/PANEL MOUNT
ROUND OPERATING HANDLE

(Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)



SPH/LPH PANEL MOUNT PISTOL OPERATING HANDLE (IP65)



DHM/PHM DOOR/PANEL MOUNT OPERATING HANDLE

(Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65)



SML PANEL MOUNT INTEGRAL LEVER OPERATING HANDLE (IP30)



SMP PANEL MOUNT INTEGRAL PADLOCKABLE LEVER OPERATING HANDLE (IP30)



MDHG/MSDHG/MPHG Door/Panel Mount Lever Operating Handle

(MDHG & MSDHG: IP55) (MPHG: IP65)



#### SPECIAL FEATURES



### Engineered to add Auxiliary Contacts, Power Poles, and Neutral Poles Easily!

Up to two modules (Auxiliary Contacts, Power Poles, and Neutral Poles) can be added to a three pole switch. One module can be installed on the left side and right side of the switch.



Normally open early make (NOEM) configuration. IP20 terminals guard against accidental contact with live parts.

DOOR MOUNT			
CODE	<b>CURRENT RATING CODE</b>	PRICE	
DNA216	16	\$ 7.00	
DNA225	25	\$ 7.00	
DNA230	30	\$ 8.00	
DNA240	40	\$ 8.50	
DNA260	60	\$ 9.50	
DNA280	80	\$11.00	
DNA2100	100	\$11.50	
DNA2125	125	\$12.00	

	PANEL MOUNT	
CODE	CURRENT RATING CODE	PRICE
PDNA216	16	\$ 7.00
PDNA225	25	\$ 7.00
PDNA230	30	\$ 8.00
PDNA240	40	\$ 8.50
PDNA260	60	\$ 9.50
PDNA280	80	\$11.00
PDNA2100	100	\$11.50
PDNA2125	125	\$12.00



Normally open (NO) configuration. IP20 terminals guard against accidental contact with live parts. Electrical ratings are equivalent to the associated switch rating (refer to specifications on page 16).

DOOR MOUNT			
CODE	CURRENT RATING CODE	PRICE	
DPA216	16	\$ 7.00	
DPA225	25	\$ 7.00	
DPA230	30	\$ 8.00	
DPA240	40	\$ 8.50	
DPA260	60	\$ 9.50	
DPA280	80	\$11.00	
DPA2100	100	\$11.50	
DPA2125	125	\$12.00	

PANEL MOUNT			
CODE	CURRENT RATING CODE	PRICE	
PDPA216	16	\$ 7.00	
PDPA225	25	\$ 7.00	
PDPA230	30	\$ 8.00	
PDPA240	40	\$ 8.50	
PDPA260	60	\$ 9.50	
PDPA280	80	\$11.00	
PDPA2100	100	\$11.50	
PDPA2125	125	\$12.50	



1 normally open early make (NOEM) and 1 normally closed (NC) contact configuration. IP20 terminals guard against accidental contact with live parts. Auxiliary contacts can be installed on switches rated 16A to 125A, reducing inventory requirements.

Ratings: AC-15: 6A at ≤240V AC 4A at 240V AC to 480V AC Continuous Thermal Current: 15A

DOOR MOUNT				
CODE	CURRENT RATING CODE	PRICE		
D16A211	16	\$11.00		
DA211	25 ~ 60	\$11.00		
D125A211	80 ~ 125	\$11.00		

PANEL MOUNT						
CODE	<b>CURRENT RATING CODE</b>	PRICE				
PA16DA211	16	\$11.00				
PADA211	25 ~ 60	\$11.00				
PA125DA211	80 ~ 125	\$11.00				

ERMINAL SHIELD

Terminal shields can be installed on the line or load side of the disconnect switch to provide extra protection and guard against accidental contact with live parts.

CODE	<b>CURRENT RATING CODE</b>	PRICE
DS2TS20	16	\$ 2.00
DS2TS60	25 ~ 60	\$ 2.00
DS2TS125	80 ~ 125	\$ 4.00



EXPANDED

PRODUCT OFFERING!

## Series DS2 | Specifications

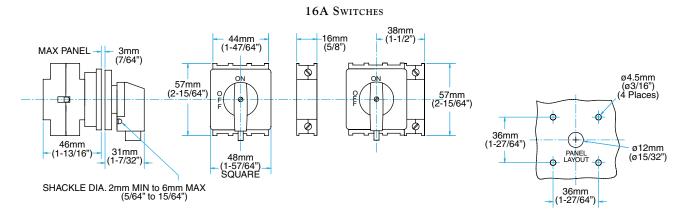
## SPECIFICATIONS:

		SWITCH CURRENT RATING CODE							
		16	25	30	40	60	80	100	125
ELECTRICAL UL/CSA APPLICATIONS									
	UNITS								
Rated Operating Voltage, Ue	VAC				600				
Rated Operating Current, le	Α	16	25	32	40	63	80	100	125
RATED 3-PHASE POWER, Pe									
@ 240V AC	HP	3	7-1/2	7-1/2	10	15	10	15	15
@ 480V AC	HP	7-1/2	15	20	20	25	30	30	40
@ 600V AC	HP	10	20	25	30	30	40	40	50
RATED SINGLE PHASE POWER, Pe									
@ 120V AC	HP	1/2	1-1/2	2	3	3	3	3	3
@ 240V AC	HP	1-1/2	2	3	4	7-1/2	7-1/2	7-1/2	10
SHORT CIRCUIT RATINGS @ 600V AC									
With Class J and CC Fuses	kA	10	10	10	10	10	10	10	10
Maximum Fuse Size	Α	20	45	45	70	70	90	90	90
ELECTRICAL IEC APPLICATIONS									
Rated Insulation Voltage, Ui	VAC				750				
Rated Impulse Voltage, Uimp	kV				6				
Rated Operating Voltage, Ue	VAC				690				
RATED OPERATING CURRENT, Ie	1 77.0								
AC-21A	l A	16	25	32	40	63	80	100	125
AC-1	A	20	32	40	63	80	80	100	125
RATED 3-PHASE POWER, AC-23A, Pe	<del>  ^</del>	20	32	40	03	00	00	100	123
@ 220 ~ 240V AC	kW	3	5-1/2	7-1/2	11	15	18-1/2	22	30
@ 380 ~ 440V AC	kW	5-1/2	11	15	18.5	30	30	37	45
@ 500 ~ 690V AC	kW	7-1/2	11	15	22	30	37	45	55
	KVV	7-1/2	111	10	22	30	31	40	
RATED 3-PHASE POWER, AC-3, Pe @ 220 ~ 240V AC	kW	2	4	5-1/2	7-1/2	11	15	18-1/2	22
@ 380 ~ 440V AC	kW	3	7.5	11		22	22	30	37
	1				18-1/2	22			
@ 500 ~ 690V AC	kW	5-1/2	11	11	18-1/2	22	30	37	45
SHORT CIRCUIT RATINGS	<u> </u>	<u> </u>							
With Type gL Fuses	kA	5	30	30	30	30	30	30	30
Maximum Fuse Size	Α	16	25	32	40	63	80	100	125
MECHANICAL	<u> </u>								
Operating Torque (Door Mount)	Nm	4.0	0.8	0.8	0.8	0.8	1	1	1
	Lb-in.	0.45	7	7	7	7	0	0	1
Operating Torque (Panel Mount)	Nm	4.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6
	Lb-in.	0.45	9	9	9	9	14	14	14
ENVIRONMENTAL									
Ambient Operating									
Temperature	°C/°F	-25 to 55° C (-13 to 131° F)							
Altitude	m/ft.	2,000/6,528							
Ingress Protection									
Switch Body	IP				20				
Operating Handles	_	IP55, IP65 Type 1, 2, 3, 3R, 4/4X, 12 and 13 (refer to specific handle catalog numbers						log numbers)	).
				IP65 and IF	P30 (refer to sp	ecific handle	catalog numb	ers).	
CONSTRUCTION									
CONDUCTOR SIZE									
UL/CSA	AWG	16 ~ 10	18 ~ 8	18 ~ 8	12 ~ 6	12 ~ 6	10 ~ 1	10 ~ 1	10 ~ 1
Solid/Multi-strand	mm <sup>2</sup>	1.5 ~ 6	1 ~ 10	1 ~ 10	4 ~ 16	4 ~ 16	6 ~ 70	6 ~ 70	6 ~ 70
Fine strand with sleeve	mm²	0.5 ~ 6	0.75 ~ 6	0.75 ~ 6	2.5 ~ 10	2.5 ~ 10	4 ~ 50	4 ~ 50	4 ~ 50
Terminal Torque	Nm	0.5 ~ 6	1.7	1.7	1.7	1.7	2.5	2.5	2.5
reminar rorque	Lb-in.	7.1	1.7	1.7	1.7	1.7	2.5	2.3	2.5
	LU-III.	7.1		compliance do					

①Consult factory

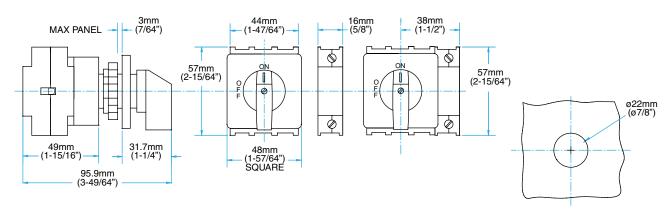


#### DOOR MOUNTED DISCONNECT SWITCH WITH MDHG OPERATING HANDLE



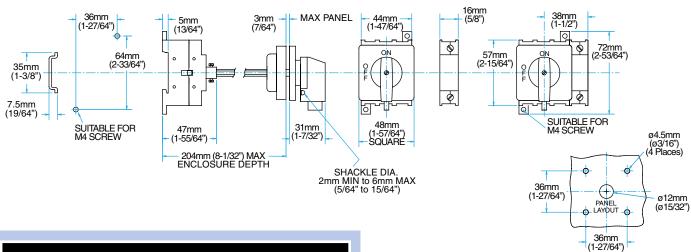
#### DOOR MOUNTED DISCONNECT SWITCH WITH MSDHG OPERATING HANDLE

#### **16A SWITCHES**



## PANEL MOUNTED DISCONNECT SWITCH WITH MPHG OPERATING HANDLE

#### 16A SWITCHES

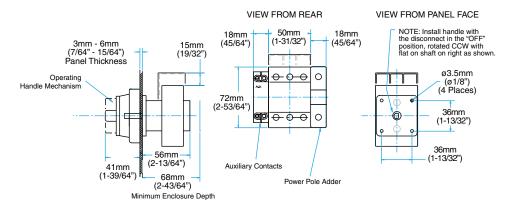


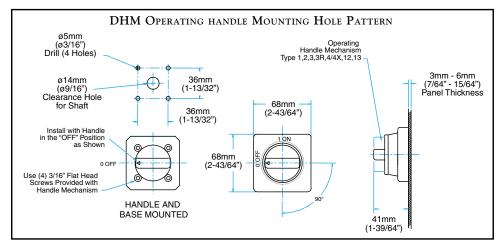
VISIT WWW.C3CONTROLS.COM TO DOWNLOAD CAD DRAWINGS



#### DOOR MOUNTED DISCONNECT SWITCH WITH DHM OPERATING HANDLE

#### 25A - 63A SWITCHES

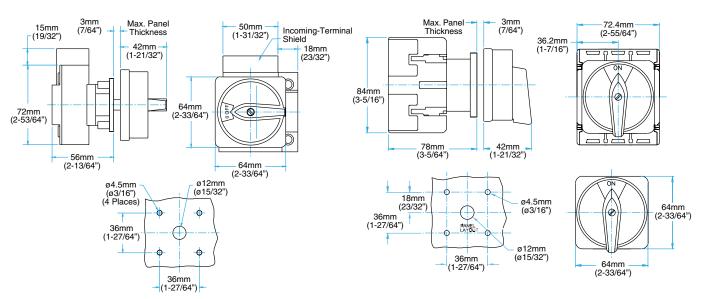




#### DOOR MOUNTED DISCONNECT SWITCH WITH DHG OPERATING HANDLE

#### 25A - 63A SWITCHES

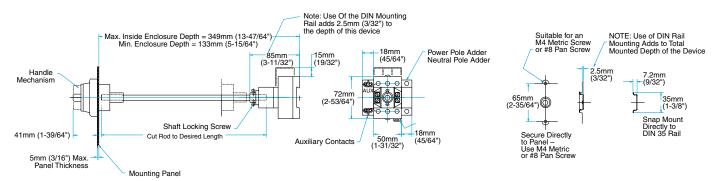
#### 80A - 125A SWITCHES



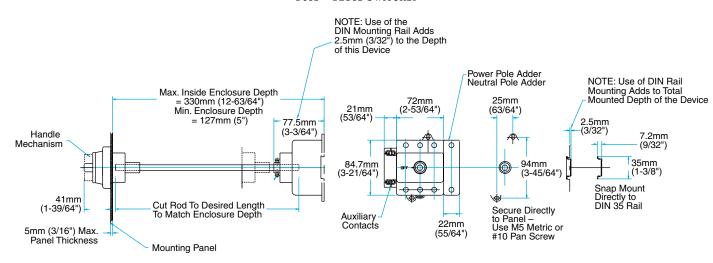


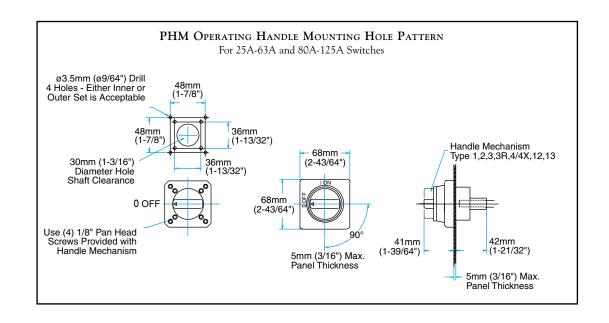
#### PANEL MOUNTED DISCONNECT SWITCHES WITH PHM OPERATING HANDLES

#### 25A - 63A SWITCHES



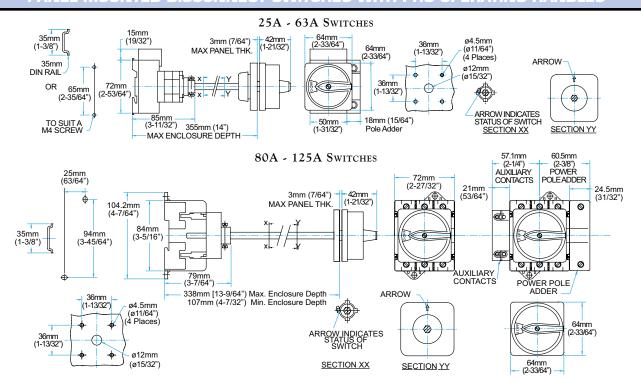
#### 80A - 125A SWITCHES





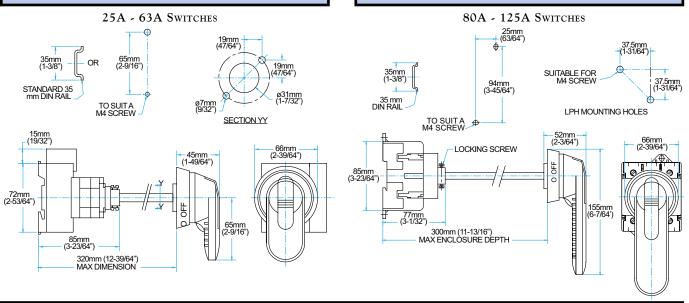


#### PANEL MOUNTED DISCONNECT SWITCHES WITH PHG OPERATING HANDLES



#### PANEL MOUNTED DISCONNECT SWITCH WITH SPH OPERATING HANDLE

#### PANEL MOUNTED DISCONNECT SWITCH WITH LPH OPERATING HANDLE



#### PANEL MOUNTED DISCONNECT SWITCH WITH SML OPERATING HANDLE

