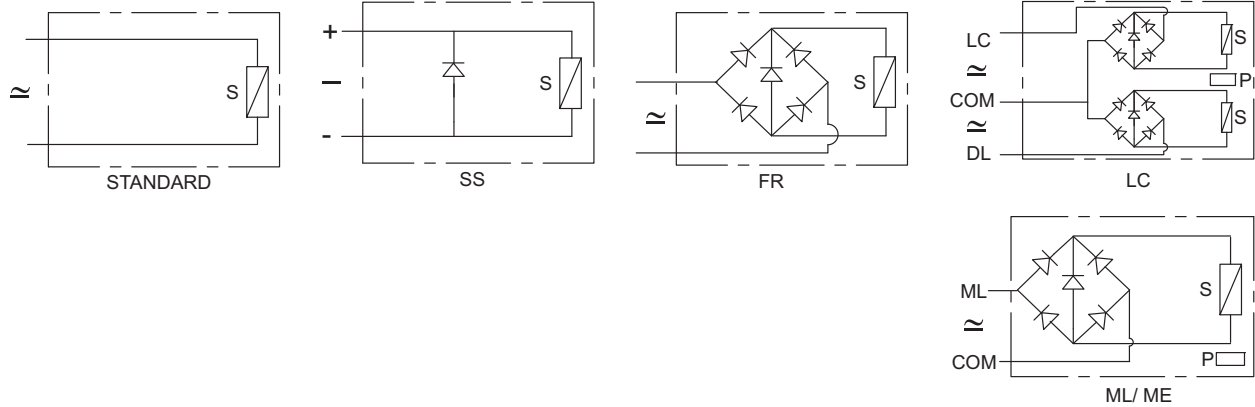


TERMINAL BOX SOLENOID TYPE : 16 & 19

CIRCUIT DIAGRAM



FEATURES

- Designed for extreme environmental condition
- With Integrated terminal box and Horizontal cable entry
- Wider voltage & frequency variation
- 'O' energiser for higher magnetic linkage
- Large terminals for easy connections
- Internal as well as external earth terminal
- Constructed for lowest temperature rise thus longer life



SPECIFICATION

Size	I- 14 mm, II- 18 mm, III- 13 mm, III & IV - 14 mm
Voltage	6 V, 12 V, 24 V, 48 V, 110 V, 120 V, 220 V, 256 V
Current	50 Hz, 60 Hz, DC, 50/ 60 Hz/ DC
Enclosure	Cable Entry M20 X 1.5 or 1/2" NPT Material Aluminum Cast Painting : Polyester Powder coated Stainless Steel Cast, Optionally Polyester Powder coated Painted
Options	Surge Suppressor(SS), Fully Rectified (FR), Latch (LC), Latch, Manual Reset OFF (ML), Manual Reset ON (MR), LED (LD)
Power	Refer to table "Power" on Page 428A
Insulation Class	Class H
Weather Protection	IP67, Optionally IP67M, IP68
Approval	Indian, European, SIL
Pick Up Voltage	≤ 70% of Rated Voltage
Drop Down	AC : ≤ 65% of Rated Voltage, DC : ≤ 30% Rated Voltage
Voltage Variation	Refer to Voltage Variation Table (on page 428B)
Duty Cycle	100% (ED)
Ambient Temperature	Class F, Power ≤ 13W, -40 °C to 75 °C Class H, Power ≤ 13W, -40 °C to 100 °C, Power ≥ 13W, -40 °C to 75 °C

WEIGHT IN kg

Size	Al	SS
I	0.5	0.8
II	0.8	1.6
III	0.6	1.4
IV	0.8	1.6

APPLICATION



INDOOR



OUTDOOR

TERMINAL BOX SOLENOID TYPE : 16 & 19

POWER

Voltage	Solenoid		Power (VA)							
	Size	Core Dia	0.4②	1.8②	3.5	5	8	12	13	30
6	I	14					▲			
	II	18					✓		▲	
	III	13	✓							
	III	14		✓	✓		▲			
	IV	14		✓						
12	I	14		✓			▲	▲		
	II	18					✓		▲	✓
	III	13	✓							
	III	14		✓	✓		▲			
	IV	14		✓						
24	I	14		✓			▲	▲		
	II	18					✓		▲	✓
	III	13	✓							
	III	14		✓	✓	✓	▲			
	IV	14		✓						
48	I	14		✓			▲	▲		
	II	18							▲	✓
	III	14		✓	✓		▲			
	IV	14		✓						
110-120	I①	14				✓	▲	▲		
	II	18					✓		▲	✓
	III	14			✓		▲			
220-240	I①	14				✓	▲	▲		
	II	18					✓		▲	✓
	III	14			✓		▲			
256②	II	18					✓		▲	✓
	III	14				✓	▲			
440④	III	14						▲		

- ▲ Standard
- ✓ Optional Available
- ① Select Current 50 Hz or 60 Hz
- ② Select Current DC
- ④ Select Current 50 Hz

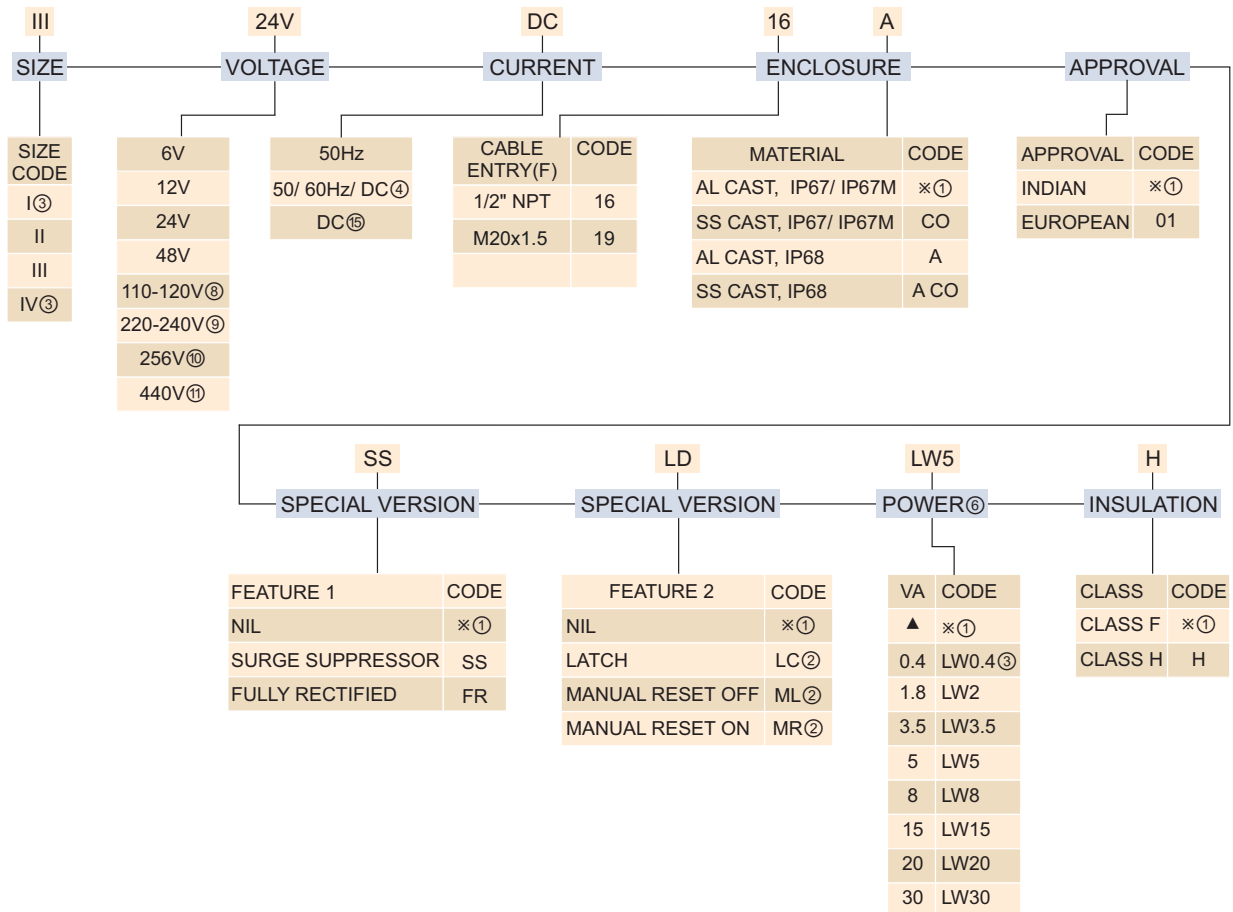
STANDARD POWER

Size	Current	Standard Power W, VA
I	AC	6, 12
	DC	8, 8
II	AC	13, 13
	DC	13, 13
III	AC	6, 12
	DC	8, 8

TERMINAL BOX SOLENOID TYPE : 16 & 19

SOLENOID ORDERING CODE

III - 24DC - 16 - A - SS - LD - LW5 - H



NOTE : ① Do not specify

② Voltage 24V, 110-120V, 220-240V current 50/ 60 Hz/ DC power standard size II/ III

③ Current 50/ 60 Hz/ DC Special version FR can not be opted

④ Select Option FR for 50/ 60 Hz/ DC current

⑥ Refer Power table on page 428A

⑧ 110-120V 50 Hz Solenoid can be used for 110V 50 Hz, 120V 60 Hz

⑨ 220-240V Solenoid can be used for 220-240V 50 Hz, 240V 60 Hz

⑩ Only for DC current

⑪ Current 50 Hz, Size III

⑬ 110-120V, 220-240V, DC can be supplied in Solenoid size II, III

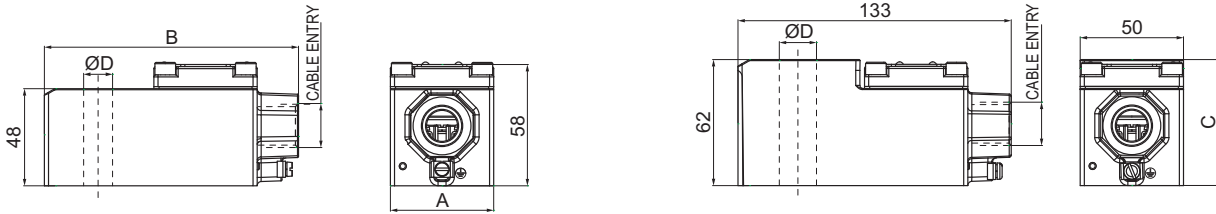
VOLTAGE VARIATION (For Continuous Duty only)

Rated Voltage	Operating Voltage
6	4.8V to 7.2V
12	9.6V to 14.4V
24	19.2V to 28.8V
48	38.4V to 57.6V
110-120	88V to 132V
220-240	176V to 264V
256	192V to 280V
440	350V to 480V

TERMINAL BOX SOLENOID TYPE : 16 & 19

DIMENSION SOLENOID TYPE :16/ 9

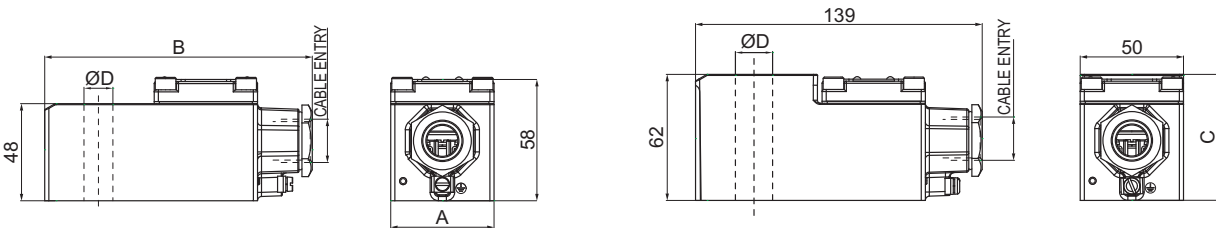
CABLE ENTRY 1/2"NPT or M20X1.5



SIZE	A	B	ØD
I	42	116	14
III	50	124	14
III	50	124	13

SIZE	C	ØD
II	61	18
IV	51	14



CABLE ENTRY M20X1.5 & 1/2" NPT (With Adopter)



SIZE	A	B	ØE
I	42	122	14
III	50	130	14
III	50	130	13

SIZE	C	ØD
II	61	18
IV	51	14

OBSELETE PRODUCTS AND ITS INTERCHANGEABILITY

 <p>Replace with Solenoid code 16 or 16MS along with Guide and Plunger assembly</p>	 <p>Solenoid Type 19 Replace with coil code 16MS</p>			
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