ISO 9001
QUALITY SYSTEM
CERTIFICATION

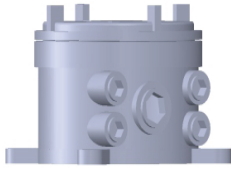
UKAS
MANAGEMENT
SYSTEMS
8175

Customised Exd Solution



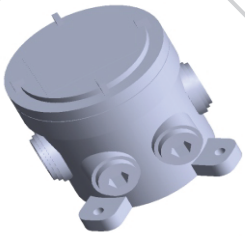






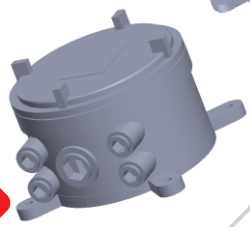
CE 0518 HEAT TRACE™ SETTING THE STANDARDS LEADING THE WAY
HELSBY, FRODSHAM WA6 0DJ
Tel: +44 (0)1928 726 451
Fax: +44 (0)1928 727 846
e-mail: info@heat-trace.com

Ex II 2 G D
Ex db IIC* [1] Gb -[2] ≤ Ta ≤ +[4]
Ex tb IIIC [3] Db -[2] ≤ Ta ≤ +[4] IP66
Type : [5] [7] W
Mounting Position [6] 000000000
ITS19ATEX104935X IECEx ITS 19.0019X
WARNING - DO NOT OPEN WHEN ENERGIZED









HEAT TRACE™
SETTING THE STANDARDS LEADING THE WAY

45 Years
1974 - 2019

R Series Explosion-proof Multipurpose Enclosures

As a Part of commitment for innovation in the industry, Heat Trace Limited is offering Customised Exd Solution.

R Series Enclosures are available in various sizes R100 (100mm Dia) ; R130 (130mm Dia), R160 (160mm Dia) & R200 (200mm Dia) which can be configured / customised based on requirement for following purpose:

- Enclosures can be used as terminal box for control, instrumentation, power and heat tracing application, thermostat, control panel, etc. or as component enclosures for housing electrical/ electronic power components (e.g. Contactor, transformer, relays, transducers, isolators, barriers, power supply, PCB etc.) and/or terminals of size and combination as required within permitted watt dissipation. The nominal rating of components and terminals is up to 1.1KV AC/DC, however items having higher rating as required may be housed inside enclosure subject to required creepage and clearance and within permitted watt loss. When enclosures are populated with Intrinsically Safe (IS) Devices necessary clearance between IS & NON-IS devices, wiring and terminals shall be maintained.
- Enclosure may be populated with separately certified control components (various type of PB actuators, rotary actuator for Switch, MCB, MPCB etc. and LED Indicating lamp etc.) in required numbers & combination within permissible limits.
- Lid may be populated with glass display window
- Power distribution, switchgear and control assembly may be formed consisting of one or more enclosures of this R series and other certified enclosures. The electrical connection shall be made by direct entry or by using terminal boxes or control and distribution boxes in type of protection increased safety.

Product highlights:

- Certified Enclosures are available in four sizes R100 (100mm Dia) ; R130 (130mm Dia), R160 (160mm Dia) & R200 (200mm Dia)
- Depending upon requirement enclosures are offered in Marine grade Copper Free Aluminum Alloy, Stainless Steel & Cast Iron
- Enclosures are suitable for Termination of Power Cable upto 50Sqmm
- Enclosures are certified for use in ambient conditions (-)60° C to (+)75° C
- Degree of protection: IP66 as per IEC 60529:2013 & EN 60529:1992+A2:2013
- Enclosures are certified for use in hazardous area IIA / IIB & IIC
- Painted Enclosures can be offered in required various Paint sheds depending upon project requirement
- Installation Accessories such as Pipe Mounting / Wall Mounting SS / GI Brackets, Pipe Straps are available on specific required.

Standard Conformity

The equipment is tested and approved for explosion hazard area to following standards and ATEX Directive 2014/34/EU.

IEC 60079-0:2017 and EN IEC 60079-0:2018, IEC 60079-1:2014 and EN 60079-1:2014, IEC60079-31:2013 and EN 60079-31:2014, IEC 60529:2013 and EN 60529:1992/A2:2013

- Flameproof aluminum, cast iron or stainless steel enclosure system suitable for assembly of terminals and industrial type components
- Certified for gas group IIA, IIB & IIC

Technical Data

Explosion	II 2 G Ex db IIC T6/T5 Gb, II 2 D Ex tb IIIC T80°C...T95°C Db
Material	Copper free aluminum Stainless steel 1.4404/316L Cast iron
Color	Aluminum: RAL 7035, light grey Stainless steel: unpainted, painting on request
Ingress Protection	P66 to EN 60529
Surface	Powder coating
Impact resistance	7 Joule to EN 60079-0
Temperature Range	-60 °C to +75 °C
Certificates	

Electrical Data

Rated operation voltage: 1.1KV AC/DC (Declared voltage rating is nominal and item having higher Voltage rating may be populated as required)

TYPE	R100	R130	R160	R200
Max Rated Current	57 A	76 A	125 A	150 A
Max Terminal Size	10 mm2	16 mm2	35 mm2	50 mm2
Max PE Conductor Size	10 mm2	16 mm2	16 mm2	25 mm2

Ambient Temperature

"-60°C /-20°C ≤ Ta ≤ +45°C/+60°C/+75°C"

- Use equipment within ambient temperature marked on Ex label

Mechanical data

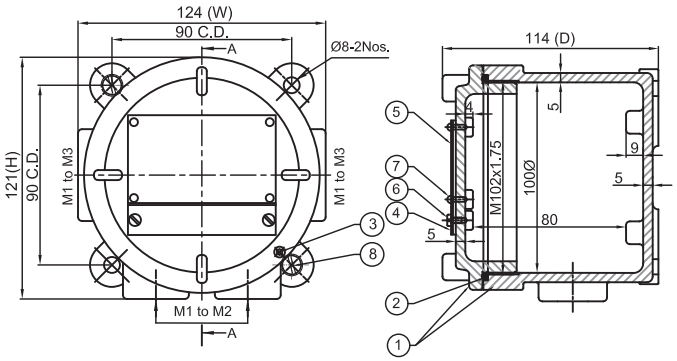
Enclosure: Copper free aluminum alloy or CI or cast SS O Ring: Silicone
Finish: RAL 7035
Earthing: 2 Nos External and 1 No Internal

Degree of protection: IP66 as per IEC 60529:2013 & EN 60529:1992+A2:2013
Installation: 2/4 mounting holes (Refer drawing)

Technical Details

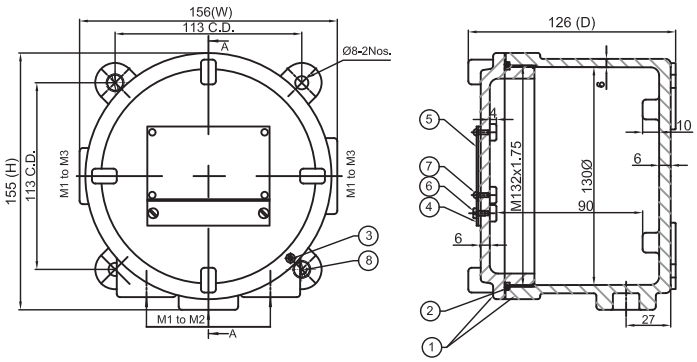
Type	Dimension (mm) +/-5%			Min wall thickness	Number of permissible Entries				Max Rated Current	Max Conductor Size
	Height	Width	Depth		M1 M20 OR 1/2" NPT	M2 M25 OR 3/4" NPT	M3 M32 OR 1" NPT	M4 M40 OR 1-1/4" NPT		
R 100	121	124	114	5	4	4	2	X	57 A	10 Sqmm
R130	155	156	126	6	5	5	2	X	76 A	16 Sqmm
R160	186	192	142	6.5	6	6	4	X	125 A	35 Sqmm
R200	224	223	150	8	5	5	1	1	150 A	50 Sqmm

R 100



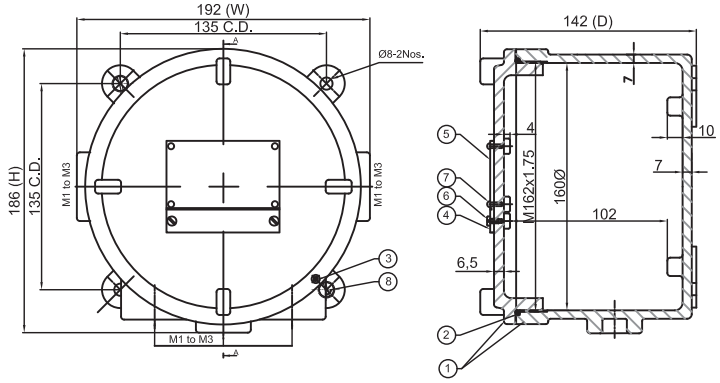
Front View | Section "A-A"

R 130



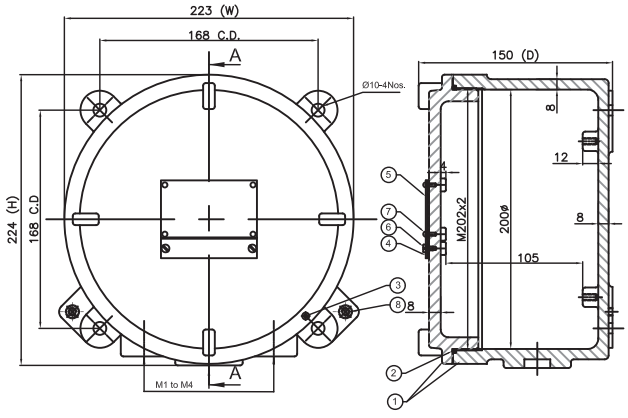
Front View | Section "A-A"

R 160



Front View | Section "A-A"

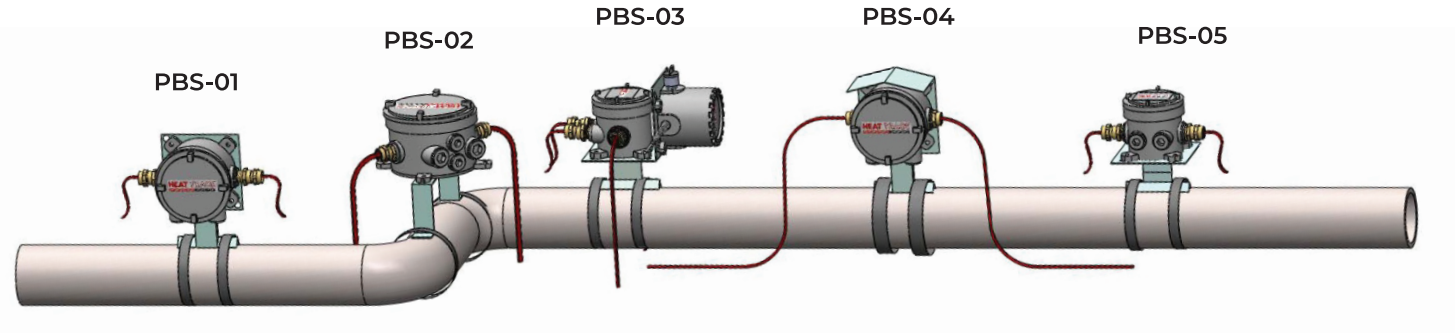
R 200

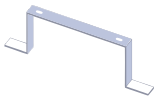
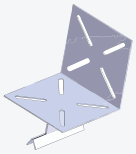
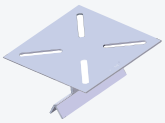


Front View | Section "A-A"

HEAT TRACE™
SETTING THE STANDARDS LEADING THE WAY

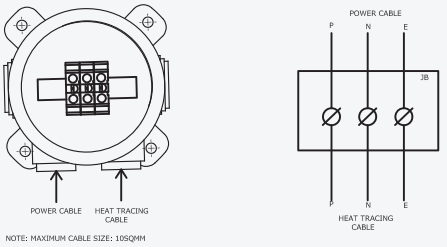
Support Bracket



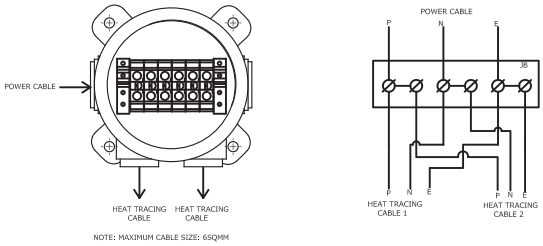
	R100	R130	R160	R200
	PBS-01-100 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 150x30x220mm	PBS-01-130 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 190x30x260mm	PBS-01-160 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 221x30x291mm	PBS-01-200 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 268x30x338mm
	PBS-02-100 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 287x30x100mm	PBS-02-130 Thickness: 1.5mm MOC: Stainless Steel Dimension: 320x30x100mm	PBS-02-160 Thickness: 1.5mm MOC: Stainless Steel Dimension: 351x30x100mm	PBS-02-200 Thickness: 1.5mm MOC: Stainless Steel Dimension: 398x30x100mm
	PBS-03-100 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 150x150x220mm	PBS-03-130 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 190x190x260mm	PBS-03-160 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 221x221x291mm	PBS-03-200 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 268x268x338mm
	PBS-04-100 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 150x30x220mm Canopy: 150x140mm	PBS-04-130 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 190x30x260mm Canopy:190x150mm	PBS-04-160 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 221x30x291mm Canopy: 221X167mm	PBS-04-200 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 268x30x338mm Canopy:268x293mm
	PBS-05-100 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 150x150x70mm	PBS-05-130 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 190x190x70mm	PBS-05-160 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 221x221x70mm	PBS-05-200 Thickness: 1.5mm MOC: Stainless Steel Dimensions: 268x268x70mm

Application Drawing (R100)

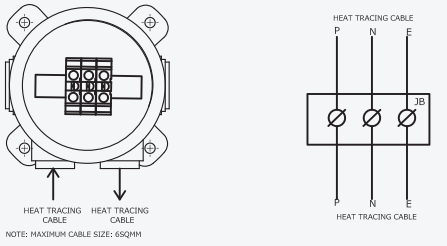
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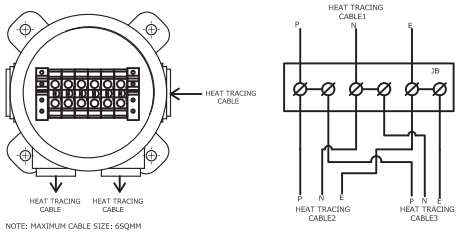
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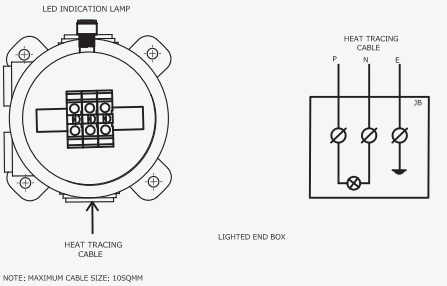
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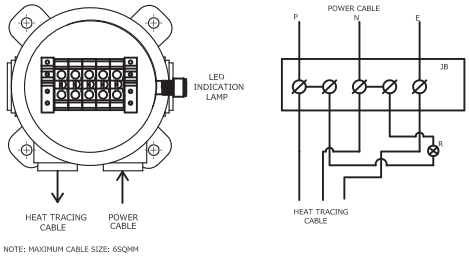
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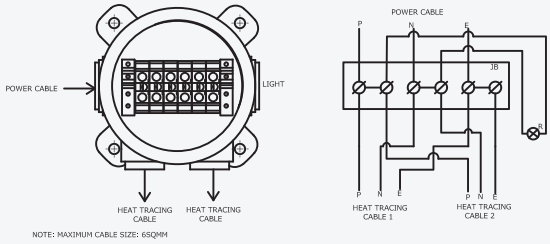
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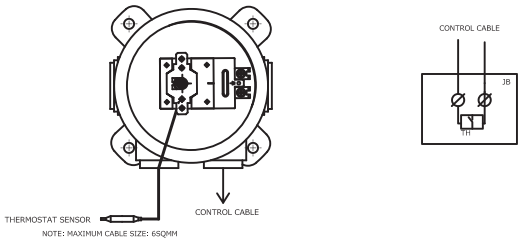
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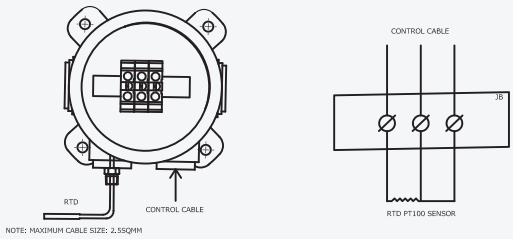
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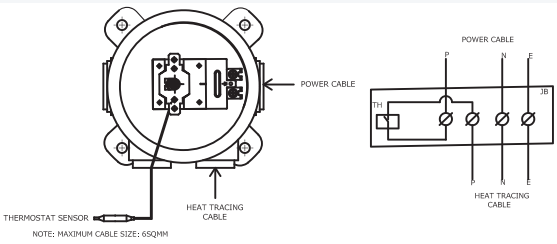
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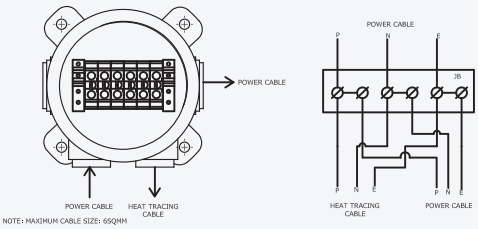
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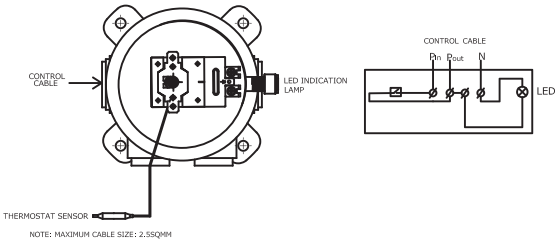
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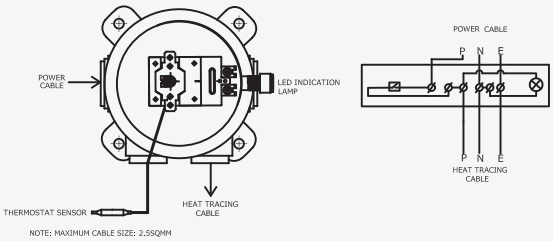
11



12



13



1. HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE
2. HEAT TRACING POWER JUNCTION BOX WITH 2 NO. HEAT TRACING CABLE
3. SPLICE CONNECTION KIT
4. TEE CONNECTION KIT
5. LIGHTED END SEAL KIT
6. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE.
7. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 2 NOS. HEAT TRACING CABLE.
8. SURFACE SENSING THERMOSTAT
9. RTD JUNCTION BOX
10. SURFACE SENSING THERMOSTAT CUM HEAT TRACING POWER JUNCTION BOX
11. HEAT TRACING POWER JUNCTION BOX WITH JUMP-OVER CABLE.
12. THERMOSTAT WITH LIGHT.
13. JB CUM THERMOSTAT WITH LIGHT.

NOTE:-

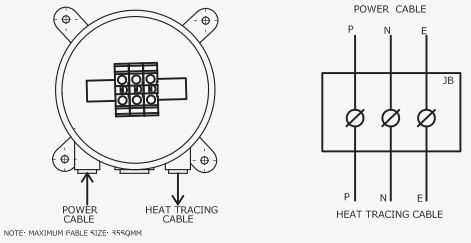
1. Maximum 10 Sqmm power cable can be terminated in the enclosure.
2. Maximum 5 terminals of 10Sqmm cab be accommodated in the enclosure.
3. Maximum no. of terminals which can be accommodated in the enclosure shall depend upon size of terminals.
4. Maximum size of the cable entry allow for the enclosure is M25 or 3/4"NPT.

HEAT TRACE™

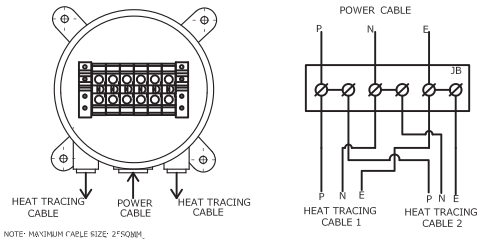
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Application Drawing (R130)

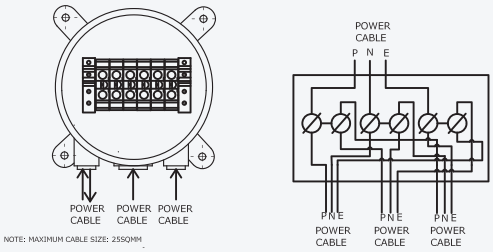
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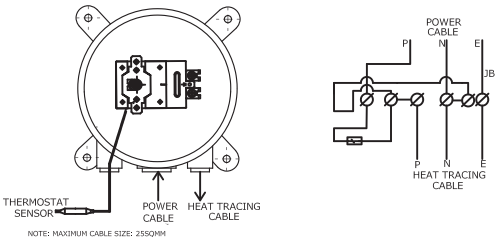
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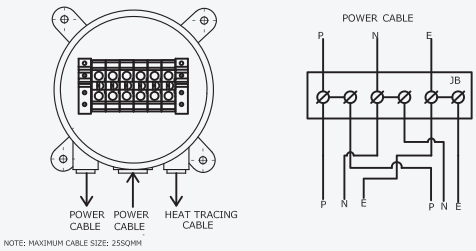
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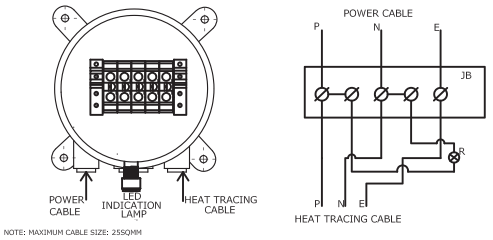
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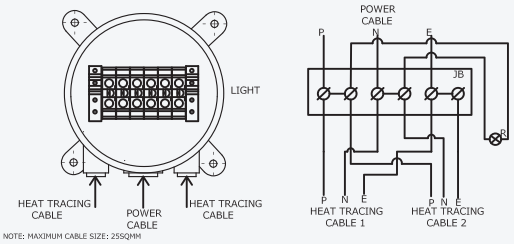
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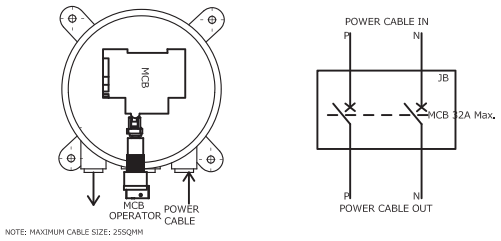
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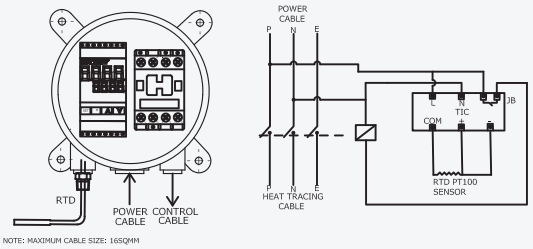
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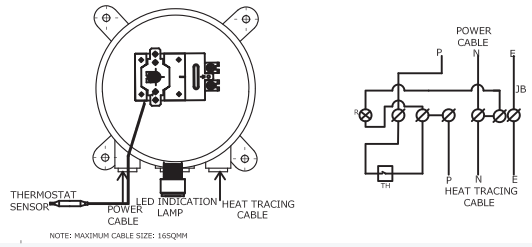
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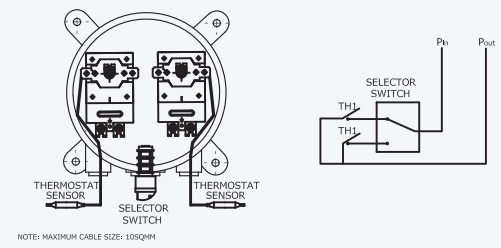
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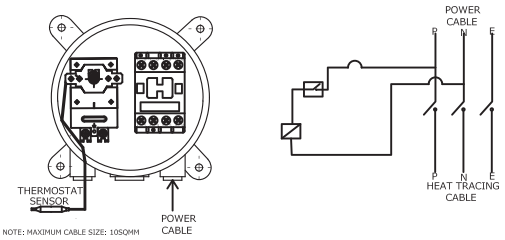
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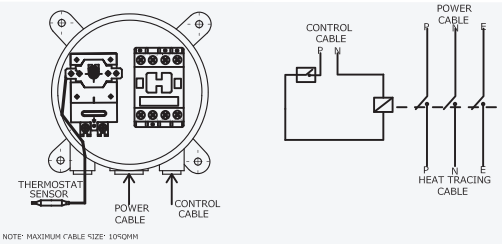
11



12



13



1. HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE.
2. HEAT TRACING POWER JUNCTION BOX WITH 2 NO. HEAT TRACING CABLE.
3. FIELD JUNCTION BOX.
4. SURFACE SENSING THERMOSTAT CUM HEAT TRACING POWER JUNCTION BOX.
5. HEAT TRACING POWER JUNCTION BOX WITH JUMP-OVER CABLE,
6. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 1 NO, HEAT TRACING CABLE,
7. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 2 NOS. HEAT TRACING CABLE.
8. MCB ISOLATOR UPTO 63A.
9. ELECTRONIC THERMOSTAT WITH POWER JUNCTION BOX.
10. LIGHTED THERMOSTAT CUM JUNCTION BOX,
11. DUAL SENSING THERMOSTAT,
12. SURFACE SENSING JUNCTION BOX UPTO 63A,
13. SURFACE SENSING WITH CONTROL SUPPLY FROM PANEL.

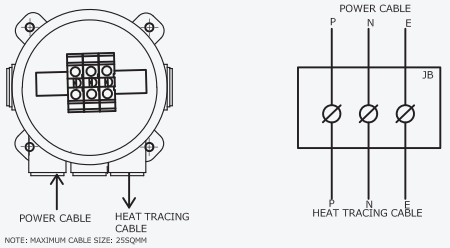
NOTE:-

1. Maximum 35 Scimm power cable can be terminated in the enclosure.
2. Maximum 5 terminals of 255qmm cab be accommodated in the enclosure.
3. Maximum no. of terminals which can be accommodated in the enclosure shall depend upon size of terminals.
4. Maximum size of the cable entry allow for the enclosure Is M40 or L-1/4'NPT,

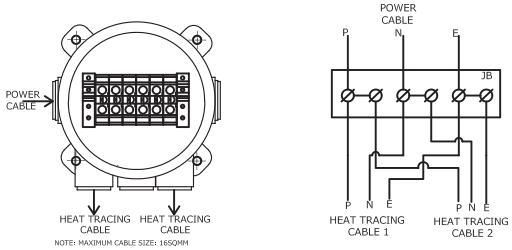
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Application Drawing (R160)

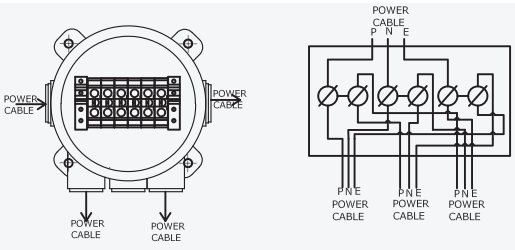
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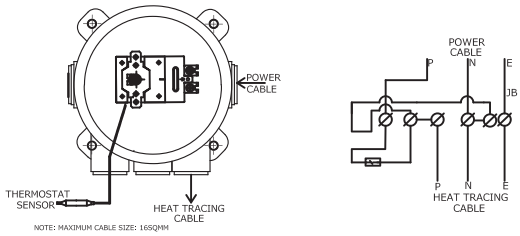
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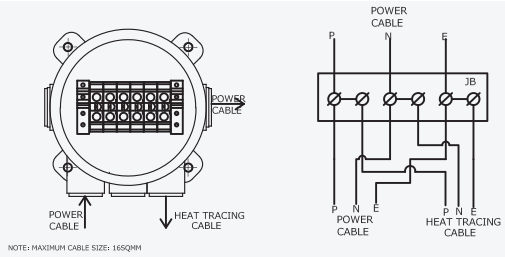
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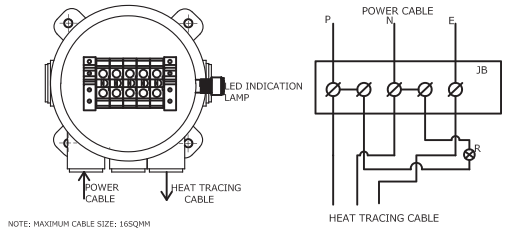
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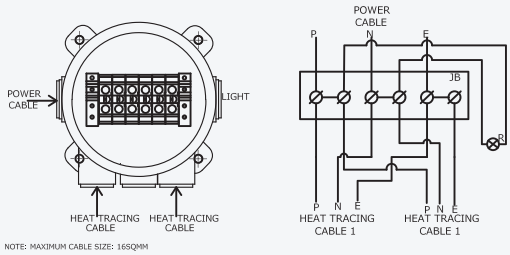
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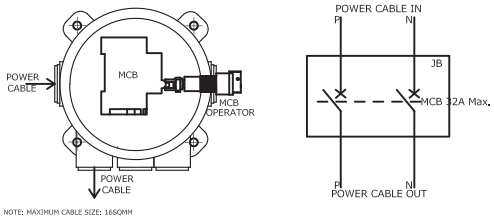
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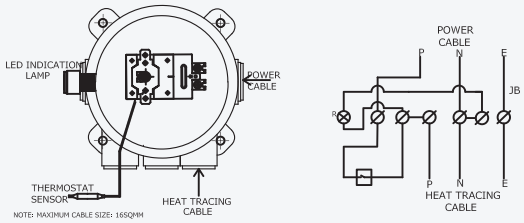
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8



9



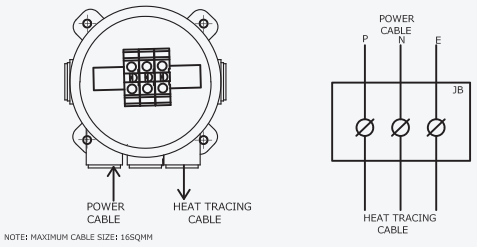
1. HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE.
2. HEAT TRACING POWER JUNCTION BOX WITH 2 NO, HEAT TRACING CABLE,
3. FIELD JUNCTION BOX.
4. SURFACE SENSING THERMOSTAT CUM HEAT TRACING POWER JUNCTION BOX,
5. HEAT TRACING POWER JUNCTION BOX WITH JUMP-OVER CABLE.
6. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 1 NO, HEAT TRACING CABLE,
7. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 2 NOS, HEAT TRACING CABLE,
8. MCB ISOLATOR UPTO 63A,
9. SURFACE SENSING THERMOSTAT CUM HEAT TRACING POWER JUNCTION BOX WITH LIGHT,

NOTE:-

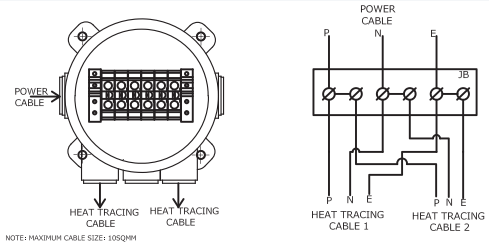
1. Maximum 25 Sqmm power cable can be terminated In the enclosure.
2. Maximum 16 terminals of 10Sqmm cab be accommodated In the enclosure.
3. Maximum no. of terminals which can be accommodated In the enclosure shall depend upon size of terminals,
4. Maximum size of the cable entry allow for the enclosure is M40 or 1-1/4"NPT.

Application Drawing (200)

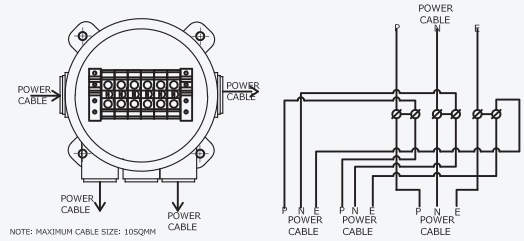
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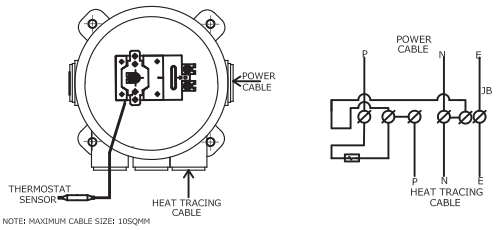
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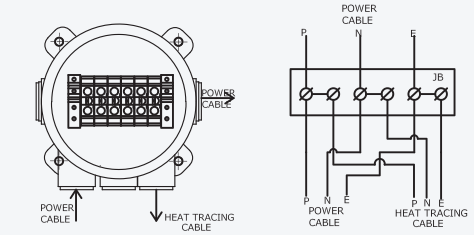
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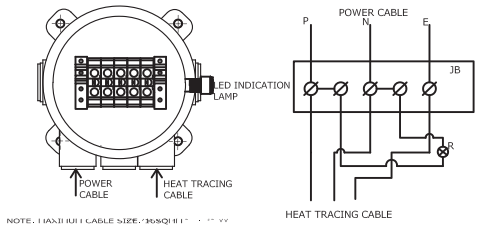
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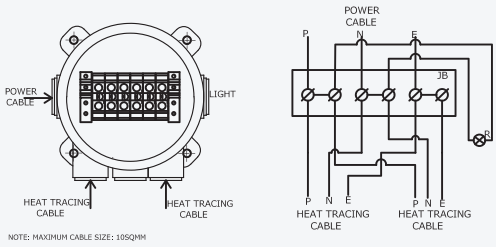
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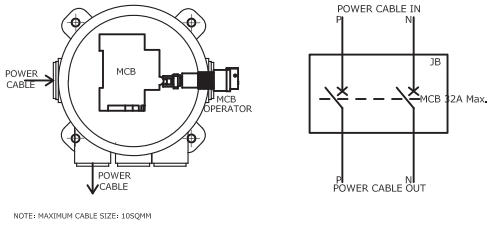
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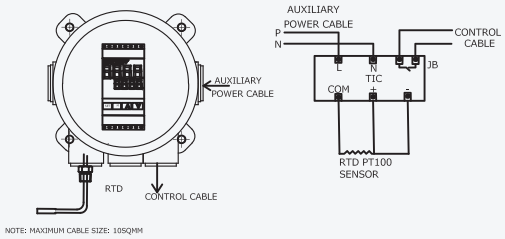
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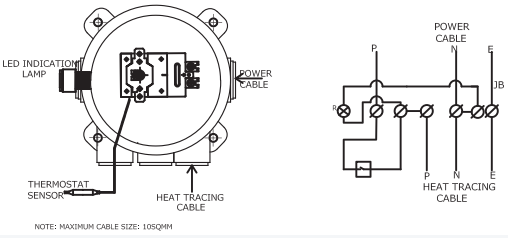
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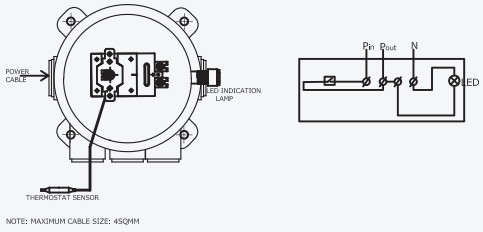
9



10



11



1. HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE.
2. HEAT TRACING POWER JUNCTION BOX WITH 2 NO, HEAT TRACING CABLE,
3. FIELD)UNCTION BOX,
4. THERMOSTAT CUM JUNCTION BOX.
5. JUMP-OVER CABLE,
6. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 1 NO. HEAT TRACING CABLE.
7. LIGHTED HEAT TRACING POWER JUNCTION BOX WITH 2 NOS, HEAT TRACING CABLE,
8. MCB ISOLATOR.
9. ELECTRONIC THERMOSTAT,
10. SURFACE SENSING THERMOSTAT CUM HEAT TRACING POWER JUNCTION BOX WITH LIGHT.
11. THERMOSTAT WITH LIGHT,

NOTE:-

1. Maximum 16 Sqmm power cable can be terminated in the enclosure.
2. Maximum 5 terminals of 10Sqmm cab be accommodated In the enclosure.
3. Maximum no. of terminals which can be accommodated in the enclosure shall depend upon size of terminals.
4. Maximum size of the cable entry allow for the enclosure Is M32 or 1"NPT.

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