

Control Station and Control Panel: Control Box, DCR series

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Application

The DCR control boxes are suitable for use in areas where Group IIC gases may be present, including any environment with a risk of explosion and/or fire, or where combustible dust is present. These areas are classified as Zone 1, Zone 2, Zone 21, and Zone 22.

They are used to produce control and signalling panels, circuit breaker boxes, and motor starter enclosures in various configurations, specifically customized to meet customer requirements.

Specification

- Body, cover : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (Grey)
(optional offshore painting- acrylic polyurethane coating)
- Bolts : Stainless steel, SS 304
(optional SS 316)
- Sealing (O-ring): Silicone



Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex db IIC T6/T5 Gb	Ex tb IIIC T85°C/ T100°C Db
Symbol of Protection	Ex db IIC T6/T5 Gb	Ex tb IIIC T85°C/ T100°C Db
Certificate	KDB 23 ATEX 0031X IECEX KDB 23.0008X	
Conformity to Standards	EN IEC 60079-0, EN 60079-1, EN IEC 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31	
Ambient Temperature	-40°C to +65°C	
Index of Protection	IP66	
Entry Threads	NPT or Metric threads	
Mounting	Wall mount	
Rated Voltage	Max. 750 V AC, 50/60 Hz	
Ground	External ground point: M5 for sizes 1–4, M8 for size 5	

Max. Dissipation Power Loss (Watts)

Cat. No.	Dissipation Power Loss by use in Temperature Class			
	T6	T5	T6	T5
	Ta +40°C		Ta +65°C	
DCR1	40	53	18	31
DCR2	45	30	20	35
DCR3	57	77	26	45
DCR4	81	108	36	63
DCR5	111	147	49	86

Catalogue Number Logic

DCR	■	-	W	-	□ □
Series	Enclosure size (see catalogue number table)	Inspection window none no window W Window	Type of application		
			U	Empty enclosure	
			T	Terminal box	
			CP	Control panel	
			MS	Motor starter box	
			CB	Circuit breaker box	

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Ordering Requirements and Dimensions

Figure-1 (Size 1,2)

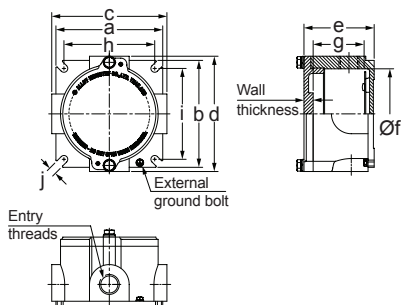


Figure-2 (Size 3)

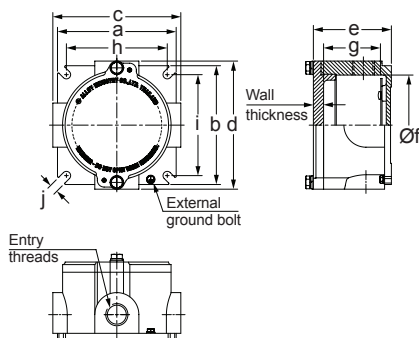
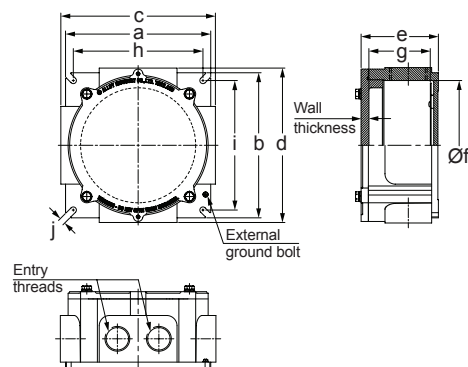


Figure-3 (Size 4,5)



Enclosure		Dimensions in mm											Wall thickness	Volume (cm³)	Weight (kg)
		Outside					Inside		Mounting			Ref. figure			
Cat. No.	Size	a	b	c	d	e	Øf	g	h	i	j				
DCR1 - □□	Size 1	105	105	114	114	92	88	63	86	86	8	Figure-1	5	400	1.0
DCR2 - □□	Size 2	115	115	134	134	92	98	63	96	96	8	Figure-1	5	600	1.4
DCR3 - □□	Size 3	140	140	151	151	92	118	63	119	119	10	Figure-2	15	790	1.7
DCR4 - □□	Size 4	172	172	180	180	124	144	93	151	151	10	Figure-3	15	1,620	4.2
DCR5 - □□	Size 5	197	197	210	210	139	174	107	170	170	12	Figure-3	15	2,740	5.5

Enclosure Drilling Data

Figure-1 (Size 1,2,3)

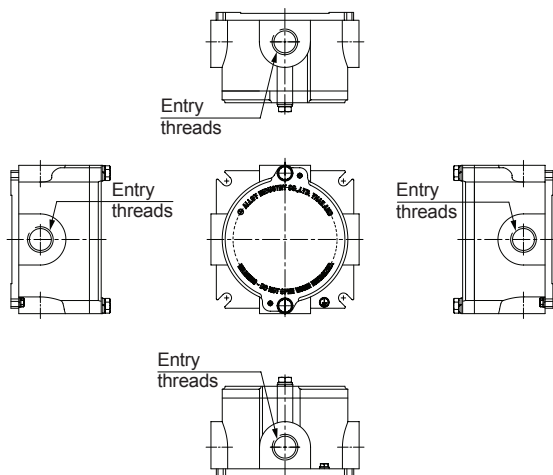
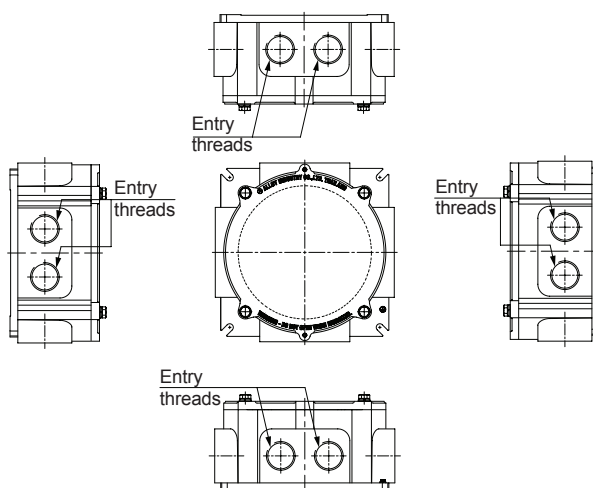


Figure-2 (Size 4,5)



Cat. No.	Drilling area (mm)	Maximum entries thread size, NPT (Metric)							
		1/2" NPT (M20x1.5)	3/4" NPT (M25x1.5)	1" NPT (M32x1.5)	1-1/4" NPT (M40x1.5)	1-1/2" NPT (M50x1.5)	2" NPT (M63x1.5)	2-1/2" NPT (M75x1.5)	3" NPT (M80x1.5)
DCR1 - □□	—	1	1	—	—	—	—	—	—
DCR2 - □□	—	1	1	1	1	—	—	—	—
DCR3 - □□	—	1	1	1	1	—	—	—	—
DCR4 - □□	—	2	2	2	1	1	—	—	—
DCR5 - □□	—	2	2	2	1	1	1	—	—

Note: All holes are intended for cable entries using cable glands.

Control Station and Control Panel: Switchrack Assemblies

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Application

The switchrack assemblies are designed for use in hazardous areas classified as Zone 1, Zone 2, Zone 21, and Zone 22.

They provide a complete solution that may include circuit breakers, motor starters, circuit breaker panelboards, terminal boxes, metering units, or control boxes — all factory-wired, assembled, and mounted on a free-standing rack.

Specification

Rack structure : Steel with hot-dip galvanized

Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	II 2G	II 2D
Symbol of Protection	Ex db IIB Gb	Ex tb IIIC Db
Conformity to Standards	EN IEC 60079-0, EN 60079-1, EN IEC 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66	
Entry Threads	NPT or Metric threads	
Mounting	Wall mount or Stanchion mount	
Rated Voltage	Max. 415 V AC, 50/60 Hz	

