

Enclosure: Terminal Boxes, DTR Series

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Application

DTR terminal boxes are designed for spliced and tapped conductors or for connecting conductors for control and instrumentation. These boxes are suitable for use in explosive atmospheres, including Zones 1, 2, 21, and 22.

Specification

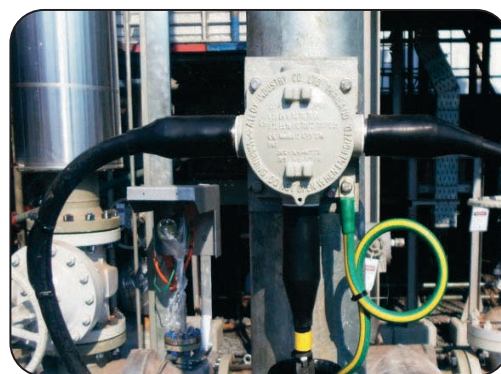
Body and cover : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey)
Sealing (O-ring) : Silicone
Screws : Stainless steel, SS 304

Electrical Rating

Rated voltage : up to 630 V AC
Rated current : up to 41 A
(as per terminal specification)

Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex d IIC 2G	Ex tb IIIC 2D
Symbol of Protection	Ex d IIC T6/T5 Gb	Ex tb IIIC T80°C/ T100°C Db
Certificate	Nemko 12 ATEX 1249	
Conformity to Standards	EN IEC 60079-0, EN 60079-1, EN IEC 60079-31	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66	
Mounting	Wall type	
Entry Threads	NPT or Metric thread	
Terminal	Terminal block for 0.5- 6 mm ² cable	
Mechanical resistance	≥7 N·m of impact energy	



Catalogue Number Logic

Series	Enclosure	Outline diagram	Entry threads	Terminals
1	Size 1	C 2-way through-feed	M0 M16x1.5	2T 2-poles
2	Size 2	L 2-way angle	M1 M20x1.5	3T 3-poles
3	Size 3	T 3-way	M2 M25x1.5	4T 4-poles
		X 4-way	M3 M32x1.5	5T 5-poles
			M4 M40x1.5	6T 6-poles
			M5 M50x1.5	8T 8-poles
			M6 M63x1.5	10T 10-poles
			N1 1/2" NPT	(see terminal selection chart)
			N2 3/4" NPT	
			N3 1" NPT	
			N4 1-1/4" NPT	
			N5 1-1/2" NPT	
			N6 2" NPT	



Terminal Selection Chart

TB model	Rated current	Rated voltage	Wire size	Maximum numbers of terminals (Respective to the temperature class)		
				Size 1 (DTR-1 □)	Size 2 (DTR-2 □)	Size 3 (DTR-3 □)
DR4/6.Ex	30 A	275 V	0.5 - 4.0 mm ²	6-poles	8-poles	10-poles
ZS4	32 A	630 V	0.5 - 4.0 mm ²	3-poles	5-poles	8-poles
ZS6	41 A	630 V	0.5 - 6.0 mm ²	—	—	6-poles



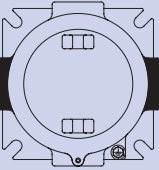
Maximum Number of Terminal Permitted for Load Current

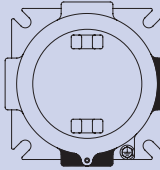
Current (A)	Cross-section in mm. ² DTR1-□				
	1.5	2.5	4	6	10
30			8	16	
10	34	In this area any number of terminals can be added to maximum physical content.			
16	11	22	87		
20	4	13	25		
25		6	14	27	
35	Fitting in this area is not allowed.				27
50					8

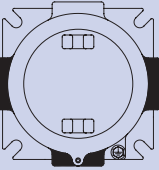
Current (A)	Cross-section in mm. ² DTR2-□				
	1.5	2.5	4	6	10
30			9	19	
10	39	In this area any number of terminals can be added to maximum physical content.			
16	13	26	102		
20	5	15	29		
25		7	16	32	
35	Fitting in this area is not allowed.				31
50					10

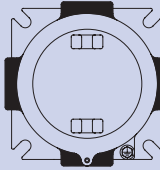
Current (A)	Cross-section in mm. ² DTR3-□				
	1.5	2.5	4	6	10
30		2	12	23	
10	48	In this area any number of terminals can be added to maximum physical content.			
16	16	32	125		
20	6	18	36		
25		9	20	39	
35	Fitting in this area is not allowed.				38
50					2

Ordering Requirements

Entry threads		Outline diagram for entry	Enclosure size	Cat. No. *
Metric	NPT			
M16x1.5		C type 2-way through-feed 	Size 1	DTR-1C-M0-□ T
M20x1.5				DTR-1C-M1-□ T
M25x1.5				DTR-1C-M2-□ T
	1/2"			DTR-1C-N1-□ T
	3/4"			DTR-1C-N2-□ T
M32x1.5			Size 2	DTR-2C-M3-□ T
M40x1.5				DTR-2C-M4-□ T
	1"			DTR-2C-N3-□ T
	1-1/4"			DTR-2C-N4-□ T
M50x1.5			Size 3	DTR-3C-M5-□ T
M63x1.5				DTR-3C-M6-□ T
	1-1/2"			DTR-3C-N5-□ T
	2"			DTR-3C-N6-□ T

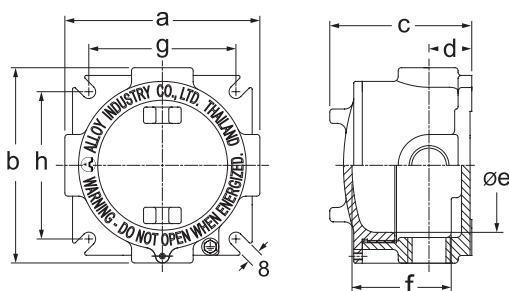
Entry threads		Outline diagram for entry	Enclosure size	Cat. No. *
Metric	NPT			
M16x1.5		L type 2-way Angle 	Size 1	DTR-1L-M0-□ T
M20x1.5				DTR-1L-M1-□ T
M25x1.5				DTR-1L-M2-□ T
	1/2"			DTR-1L-N1-□ T
	3/4"			DTR-1L-N2-□ T
M32x1.5			Size 2	DTR-2L-M3-□ T
M40x1.5				DTR-2L-M4-□ T
	1"			DTR-2L-N3-□ T
	1-1/4"			DTR-2L-N4-□ T
M50x1.5			Size 3	DTR-3L-M5-□ T
M63x1.5				DTR-3L-M6-□ T
	1-1/2"			DTR-3L-N5-□ T
	2"			DTR-3L-N6-□ T

Entry threads		Outline diagram for entry	Enclosure size	Cat. No. *
Metric	NPT			
M16x1.5		T type 3-way 	Size 1	DTR-1T-M0-□ T
M20x1.5				DTR-1T-M1-□ T
M25x1.5				DTR-1T-M2-□ T
	1/2"			DTR-1T-N1-□ T
	3/4"			DTR-1T-N2-□ T
M32x1.5			Size 2	DTR-2T-M3-□ T
M40x1.5				DTR-2T-M4-□ T
	1"			DTR-2T-N3-□ T
	1-1/4"			DTR-2T-N4-□ T
M50x1.5			Size 3	DTR-3T-M5-□ T
M63x1.5				DTR-3T-M6-□ T
	1-1/2"			DTR-3T-N5-□ T
	2"			DTR-3T-N6-□ T

Entry threads		Outline diagram for entry	Enclosure size	Cat. No. *
Metric	NPT			
M16x1.5		X type 4-way 	Size 1	DTR-1X-M0-□ T
M20x1.5				DTR-1X-M1-□ T
M25x1.5				DTR-1X-M2-□ T
	1/2"			DTR-1X-N1-□ T
	3/4"			DTR-1X-N2-□ T
M32x1.5			Size 2	DTR-2X-M3-□ T
M40x1.5				DTR-2X-M4-□ T
	1"			DTR-2X-N3-□ T
	1-1/4"			DTR-2X-N4-□ T
M50x1.5			Size 3	DTR-3X-M5-□ T
M63x1.5				DTR-3X-M6-□ T
	1-1/2"			DTR-3X-N5-□ T
	2"			DTR-3X-N6-□ T

* Replace □ with number of terminals (see terminal selection chart)

Dimensions



Enclosure size	Dimensions in mm								Approx. weight (kg)
	a	b	c	d	øe	f	g	h	
Size 1	114	114	83	25	88	58	86	86	0.98
Size 2	124	124	99	34	98	72	96	96	1.65
Size 3	144	144	121	43.5	118	94	123	123	2.35