

# Enclosure: Terminal Boxes, DTR Series

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



## Application

The DTR terminal boxes are designed for spliced and tapped conductors or connecting of conductor for control and instrument. These boxes are suitable for explosive atmospheres Zone 1, 2 and Zone 21, 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, SUS 304

## Electrical Rating

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

## Technical Data

<b>Hazardous Area</b>	<b>Gas</b>	<b>Dust</b>
<b>Zones</b>	<b>1 &amp; 2</b>	<b>21 &amp; 22</b>
<b>Equipment Group/Category</b>	Ex d II 2G	Ex tb II 2D
<b>Symbol of Protection</b>	Ex d IIC T6/T5 Gb	Ex tb IIIC T80°C/ T100°C Db
<b>Certificate No.</b>	Nemko 12 ATEX 1249	
<b>Conformity to Standards</b>	EN 60079-0:2009, EN 60079-1:2007, EN 60079-31:2009	
<b>Ambient Temperature</b>	-20°C to +55°C	
<b>Index of Protection</b>	IP66	
<b>Mounting</b>	Wall type	
<b>Entries</b>	NPT or Metric thread	
<b>Terminal</b>	Terminal block for 0.5- 6 mm. <sup>2</sup> cable	
<b>Mechanical resistance</b>	≥7Nm. of impact energy	



## Catalogue Number Logic

<b>DTR</b> -	■	■	-	■ ■	-	□ T
<b>Series</b>	<b>Enclosure</b>	<b>Outline Diagram</b>		<b>Entries</b>		<b>Terminals</b>
1	Size 1	C 2-ways Through-feed		M0 M16x1.5	N1 1/2" NPT	2T 2-Poles
2	Size 2	L 2-ways Angle		M1 M20x1.5	N2 3/4" NPT	3T 3-Poles
3	Size 3	T 3-ways		M2 M25x1.5	N3 1" NPT	4T 4-Poles
		X 4-ways		M3 M32x1.5	N4 1-1/4" NPT	5T 5-Poles
				M4 M40x1.5	N5 1-1/2" NPT	6T 6-Poles
				M5 M50x1.5	N6 2" NPT	8T 8-Poles
				M6 M63x1.5		10T 10-Poles
						(see terminal selection chart)



## 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	30A.	275V.	0.5 - 4.0 mm. <sup>2</sup>	6-Poles	8-Poles	10-Poles
ZS4	32A.	630V.	0.5 - 4.0 mm. <sup>2</sup>	3-Poles	5-Poles	8-Poles
ZS6	41A.	630V.	0.5 - 6.0 mm. <sup>2</sup>	-	-	6-Poles



A  
B  
C  
D  
E  
F  
G  
H

## Maximum Number of Terminal Permitted for Load Current

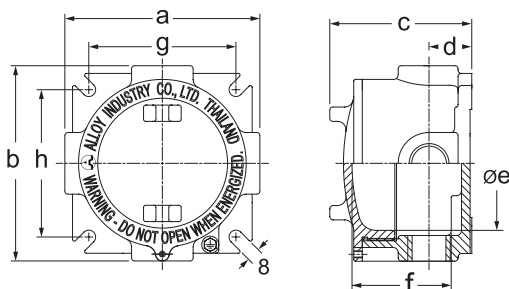
Current (A)	Cross-section in mm. <sup>2</sup> DTR1-□					Current (A)	Cross-section in mm. <sup>2</sup> DTR2-□					Current (A)	Cross-section in mm. <sup>2</sup> DTR3-□					
	1.5	2.5	4	6	10		1.5	2.5	4	6	10		1.5	2.5	4	6	10	
30			8	16		30			9	19		30		2	12	23		
10	34	In this area any number of terminals can be added to maximum physical content.				10	39	In this area any number of terminals can be added to maximum physical content.				10	48	In this area any number of terminals can be added to maximum physical content.				
16	11	22	87			16	13	26	102			16	16	32	125			
20	4	13	25			20	5	15	29			20	6	18	36			
25		6	14	27		25		7	16	32		25		9	20	39		
35	Fitting in this area is not allowed.				4	10	27	Fitting in this area is not allowed.				5	12	31	Fitting in this area is not allowed.			
50					8	50					10	50				2	12	

## Ordering Requirements

Entries		Outline Diagram for Entries	Enclosure Size	Cat. No. *	Entries		Outline Diagram for Entries	Enclosure Size	Cat. No. *
Metric	NPT				Metric	NPT			
M16x1.5		<b>C type</b> 2-ways Through-Feed 	Size 1	DTR-1C-M0-□ T	<b>L type</b> 2-ways Angle 	Size 1	DTR-1L-M0-□ T		
M20x1.5				DTR-1C-M1-□ T			DTR-1L-M1-□ T		
M25x1.5				DTR-1C-M2-□ T			DTR-1L-M2-□ T		
	1/2"			DTR-1C-N1-□ T			DTR-1L-N1-□ T		
	3/4"			DTR-1C-N2-□ T			DTR-1L-N2-□ T		
M32x1.5				DTR-2C-M3-□ T			Size 2	DTR-2L-M3-□ T	
M40x1.5			DTR-2C-M4-□ T	DTR-2L-M4-□ T					
	1"		DTR-2C-N3-□ T	DTR-2L-N3-□ T					
	1-1/4"		DTR-2C-N4-□ T	DTR-2L-N4-□ T					
M50x1.5			DTR-3C-M5-□ T	Size 3		DTR-3L-M5-□ T			
M63x1.5			DTR-3C-M6-□ T			DTR-3L-M6-□ T			
	1-1/2"		DTR-3C-N5-□ T			DTR-3L-N5-□ T			
	2"	DTR-3C-N6-□ T	DTR-3L-N6-□ T						
M16x1.5		<b>T type</b> 3-ways 	Size 1		DTR-1T-M0-□ T	<b>X type</b> 4-ways 	Size 1	DTR-1X-M0-□ T	
M20x1.5					DTR-1T-M1-□ T			DTR-1X-M1-□ T	
M25x1.5				DTR-1T-M2-□ T	DTR-1X-M2-□ T				
	1/2"			DTR-1T-N1-□ T	DTR-1X-N1-□ T				
	3/4"			DTR-1T-N2-□ T	DTR-1X-N2-□ T				
M32x1.5				DTR-2T-M3-□ T	Size 2			DTR-2X-M3-□ T	
M40x1.5			DTR-2T-M4-□ T	DTR-2X-M4-□ T					
	1"		DTR-2T-N3-□ T	DTR-2X-N3-□ T					
	1-1/4"		DTR-2T-N4-□ T	DTR-2X-N4-□ T					
M50x1.5			DTR-3T-M5-□ T	Size 3			DTR-3X-M5-□ T		
M63x1.5			DTR-3T-M6-□ T				DTR-3X-M6-□ T		
	1-1/2"		DTR-3T-N5-□ T		DTR-3X-N5-□ T				
	2"	DTR-3T-N6-□ T	DTR-3X-N6-□ T						

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

## Dimension



Enclosure Size	Dimension in mm.								Approx. Weight (kgs.)
	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