

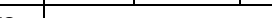
Data Sheet

DP-34045-2-000	
<i>xtremeDB</i>	
<i>xDB-2-CAN</i>	
<i>CAN Splitter</i>	
<i>8-32 Vdc</i>	
<i>United States</i> <i>Patent:</i> <i>US 10,069,226</i> <i>Sep. 4, 2018</i>	

The figure shows a technical drawing of the DP-34045-2-000 component. The top view includes dimensions: 8.07 [205] for the overall width, 3.80 [97] for the height, .30 [8] for the top edge thickness, .20 [5] for the bottom edge thickness, 10.43 [265] for the distance between the center of the first and last connector, and 2.05 [52] for the distance between the two circular mounting holes. Labels point to specific connectors: DT06-4S, DT16-18SA-K004, and a circular feature with a diameter of Ø .22 [6]. The side view shows a height of 1.28 [33] and a bottom edge thickness of .06 [2].

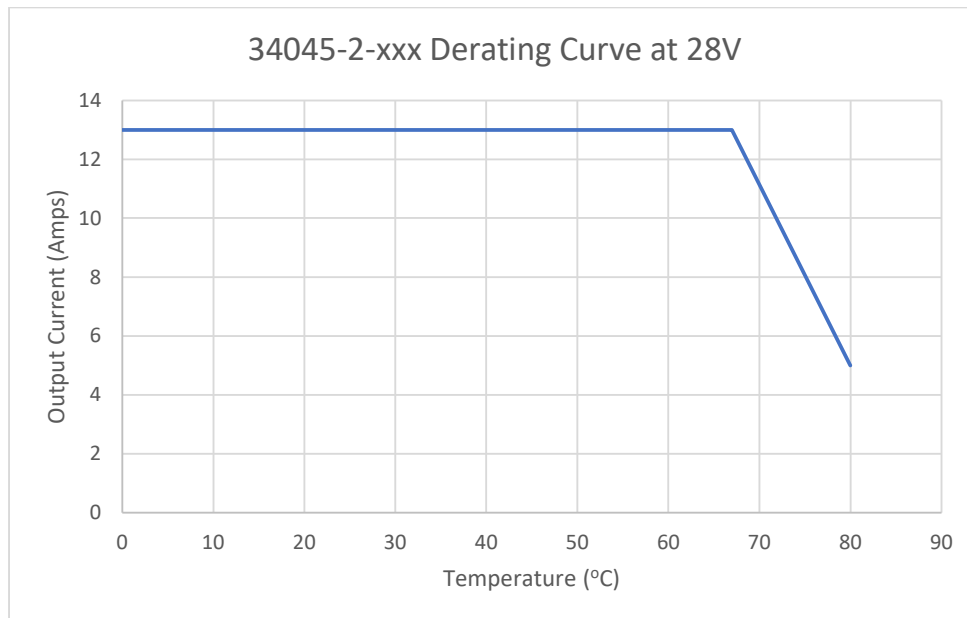
Technical Data	
Housing	Molded plastic
Dimensions (l x w x h)	3.80 x 10.43 x 1.34 in (97 x 265 x 34 mm)
Weight	1.5 lbs (0.68 kg)
Installation (mounting hardware not included)	Screw: 3 x #10 (3 x M5) Torque: 21 in-lbs (2.4 Nm) max.
Mating Connectors and Accessories I/O-Ports	4 Pole Plug 10 x DT06-4S or equivalent
DEUTSCH size 20 Socket	0462-201-20141
DEUTSCH size 16 Socket	0462-201-16141
DEUTSCH Seal Plug	114017-ZX
Total CAN Splitters	10
Operating Voltage (Power)	8...32 V DC
Switching Current	13 A per pin max.
Total Current (Power)	13 A max.
Operating Temperature	-40...80 °C
Storage Temperature	-40...85 °C
Protection Class	IP67: Connector seal plugs required for unused pins. Sealing plugs required for unused ports IP68/IP69K: Using MDC xtreme cables.



					Date	Name	Data Sheet xtremeDB CAN Splitter xDB-2-CAN		
				Originator	02.10.17	JNa			
e	DCN F412	10.02.20	TMc	Approved	02.10.17	KGu			
d	DCN F256	05.18.20	FSa	 A Murrelektronik Company					
c	DCN F112	12.02.19	FSa						
Rev.	Description	Date	Name				Art. No.: DP-34045-2-000		Sheet 1 of 4
b	Initial release	02.10.17	JNa	DP-34045-2-000_db_e_e.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.		

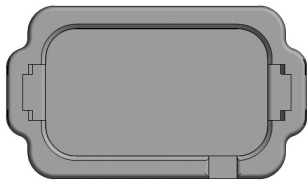
Operating States (LEDs)	Color	Status
PWR	Blue	Module and Ports power are connected
Test Standards and Regulation		
Climatic Tests	Cold Temperature to IEC 60068-2-1:2007, test Ad Dry Heat to IEC 60068-2-2:2007, test Bb Temperature Durability to IEC 60068-2-14:2000-08, test Nb Temperature Shock to IEC 60068-2-14:2000-08, test Na Humidity Soak to IEC 60068-2-78:2001, test Cab Humidity Cycle to IEC 60068-2-30:2005, test Db	
Mechanical Tests	Swept Sine Vibration to IEC 60068-2-6:2007, test Fc Random Vibration to IEC 60068-2-64:2008, test Fh Resonance Vibration to IEC 60068-2-6:2007, Section 8.1 Mechanical Shock to EN 60068-2-27:2008, test Ea Mechanical Bump to EN 60068-2-27:2008, test Ec IP protection to EN 60529:2000-09, test IP67, IP68, IP69K Chemical Loads to ISO 16750-5:2010 Part 5: AA, BA, BC, BD, BE, CC, DB, DD	
CE	RoHS: Directive 2011/65/EU	

Derating Curve

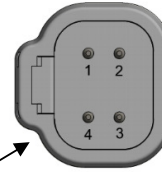
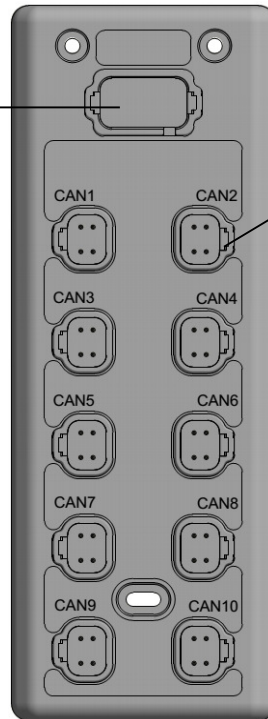
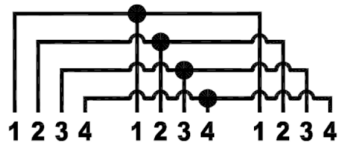


					Date	Name	Data Sheet xtremeDB CAN Splitter xDB-2-CAN	
				Originator	02.10.17	JNa		
e	DCN F412	10.02.20	TMc	Approved	02.10.17	KGu		
d	DCN F256	05.18.20	FSa	DATA PANEL A Murrelektronik Company				
c	DCN F112	12.02.19	FSa				Art. No.: DP-34045-2-000	
Rev.	Description	Date	Name					
b	Initial release	02.10.17	JNa	DP-34045-2-000_db_e_e.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

Connector Interface



Connections:
No Connection



Connections:
CAN Ports 1 to 10
Pin 1 = Power
Pin 2 = CAN High
Pin 3 = Ground A
Pin 4 = CAN Low

Ports are connected internally in series with each other to conform to trunk/drop system

					Date	Name	Data Sheet xtremeDB CAN Splitter xDB-2-CAN	
				Originator	02.10.17	JNa		
e	DCN F412	10.02.20	TMc	Approved	02.10.17	KGu		
d	DCN F256	05.18.20	FSa	DATA PANEL A Murrelektronik Company				
c	DCN F112	12.02.19	FSa				Art. No.: DP-34045-2-000	
Rev.	Description	Date	Name					
b	Initial release	02.10.17	JNa	DP-34045-2-000_db_e_e.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

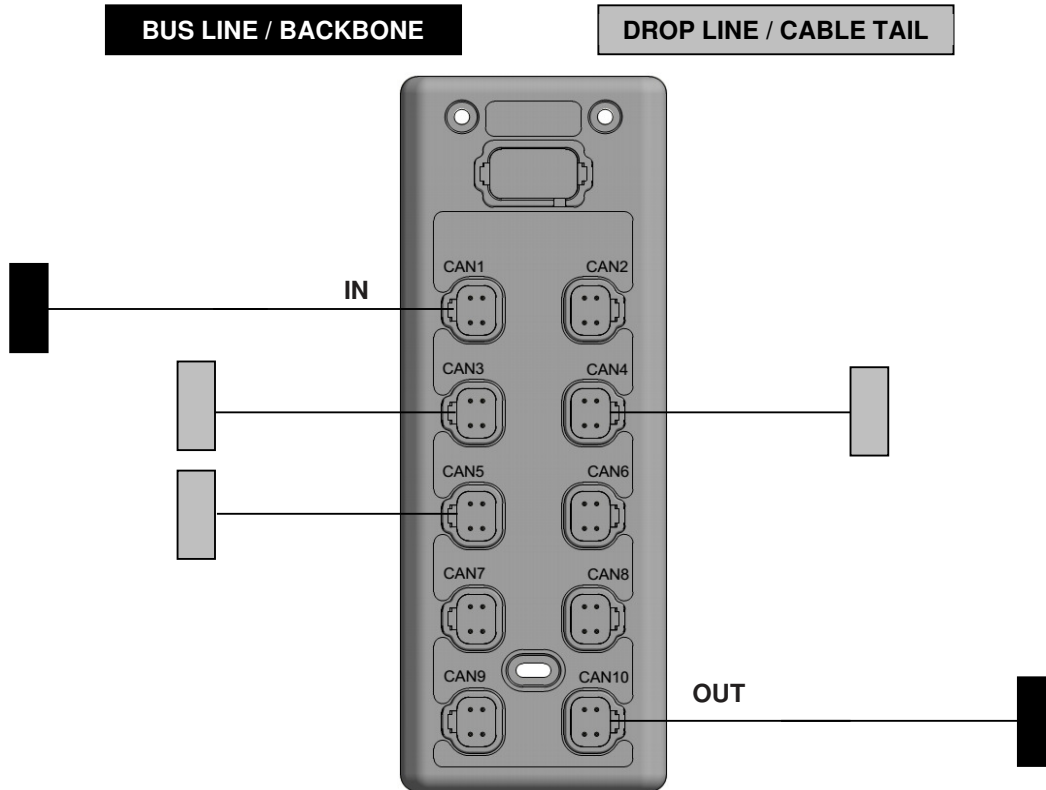
SIGNAL REFLECTIONS CAUSED BY DROP LINES!

Drop lines can give rise to signal reflections in CAN networks.

When using splitters in CAN networks, the possible drop line lengths are reduced further.

- Drop lines should vary in length to reduce the rise of signal reflections.
- Terminate the bus line at both ends with a $120\ \Omega$ resistor.
- Do not terminate drop lines with a resistor under any circumstances!

Drop Lines



Sample Topology of Drop Lines:

The following table shows the maximum drop line lengths and the maximum length of the CAN bus line. The table specifies the maximum drop line lengths and the maximum length of the CAN bus line (drop lines not included) using a splitter.

Baud Rate	Drop Line Length	Total Length
1 Mbit/s	< 0.3 m	< 25 m
500 kbit/s	< 1.2 m	< 66 m
250 Kbit/s	< 2.4 m	< 120 m
125 Kbit/s	< 4.8 m	< 310 m

				Date	Name	Data Sheet xtremeDB CAN Splitter xDB-2-CAN		
			Originator	02.10.17	JNa			
e	DCN F412	10.02.20	TMc	Approved	02.10.17			KGu
d	DCN F256	05.18.20	FSa	DATA PANEL A Murrelektronik Company				
c	DCN F112	12.02.19	FSa					
Rev.	Description	Date	Name	Art. No.: DP-34045-2-000			Sheet	
b	Initial release	02.10.17	JNa				4 of 4	
				DP-34045-2-000_db_e_e.docx			The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	