

# DATA SHEET

## DP-32054-3

Valve Drive Module  
 VDM0404  
 I/O Node or Controller  
 CANBUS  
 4 Inputs and 4 Outputs  
 Small Footprint

This fully-sealed device, designed for heavy duty electric, hydraulic, and pneumatic applications, has an externally activated magnetic sensor that toggles programs in DPLogic. Set-up is quick with easy connection to other parts from different applications.

### DPLogic

DPLogic is a library of files used with the Microchip PIC compiler to process DPLogic records, which are created with a PC-based Graphical User Interface. DPLogic is used to program Data Panel CAN (J1939)-based DPLogic certified modules.



### Mechanical Data

Housing	.062" aluminum Hard Coat black anodized bent metal
Dimensions (l x w x h)	7.00 x 4.55 x 1.13 in. (177.80 x 115.57 x 28.70 mm)
Weight	1.10 lbs (500 g)
Installation	Flange

### Technical Data

Connections:	MFG (DP):
Connectors	12 pin DT15-12PA (134-1300-01612)
Mating Connectors	12 pin DT06-12SA (134-1000-01612)
Terminals	DEUTSCH 0462-201-20141 (134-0850-B0700)
Miscellaneous	Wedgelock W12S (134-16A0-00012)
Operating Voltage	9-16.5 Vdc
Switching Current	5 A
Total Module Current	20 A at 14.5 Vdc
Operating Temperature	-40...80 °C
Storage Temperature	-40...85 °C
Ingress Protection	IP67
Baud Rate	250k bits/sec (CAN 2.0 B)

### Test Standards and Regulation


Climatic test	Storage Temperature to IEC 60068-2-1, Test Ad, IEC 60068-2-2, Test Bb Temperature Durability to IEC 60068-2-14, Test Nb
Mechanical test	Max Temperature—Max Current to JDQ 53.3, Section 9 Drop Test—With Shipping Container to IEC 60068-2-31, Test Ec Ignition Protection Test to ISO 8846
Electrical test	Electrical Tests to ISO 16750-2:2003 Vehicle Start Cycle—Brown Out to DP DSGN-3012 Power Cycle Tests Power Decay—Battery Drain to DP DSGN-3012 Power Cycle Tests

### Connector Pinout

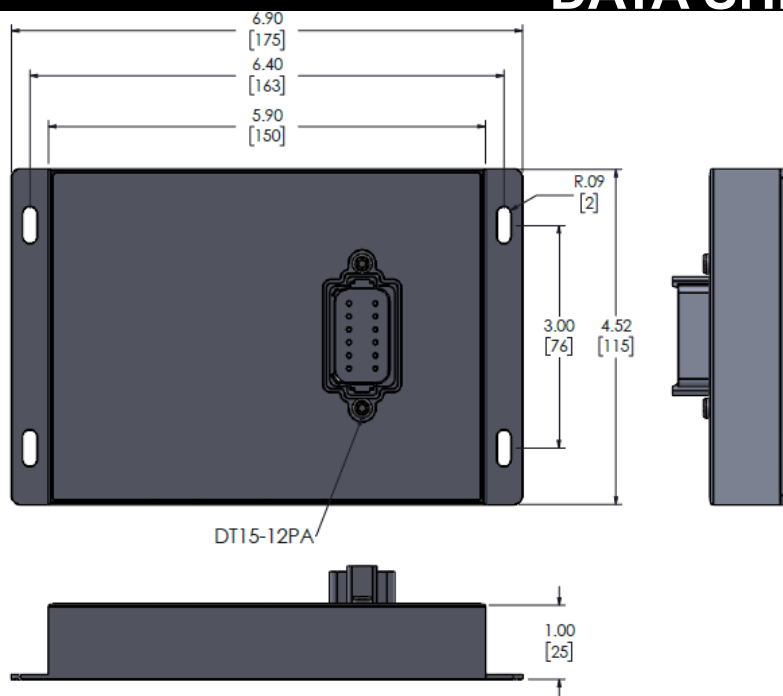
Connector	Function	Description	Rating
J1-1	GROUND	Vdc Battery Return	13 A
J1-2	IN1	Positive Digital Input 1	0.1 A @ +12 Vdc
J1-3	IN2	Positive Digital Input 2	0.1 A @ +12 Vdc
J1-4	IN3	Positive Digital Input 3	0.1 A @ +12 Vdc
J1-5	IN4	Positive Digital Input 4	0.1 A @ +12 Vdc
J1-6	BATTERY	+14.5 Vdc Battery	13 A
J1-7	CAN High	Communication	
J1-8	OUT4	Digital Output 4	5 A
J1-9	OUT3	Digital Output 3	5 A
J1-10	OUT2	Digital Output 2	5 A
J1-11	OUT1	Digital Output 1	5 A
J1-12	CAN Low	Communication	

### Operating States (LEDs)

Operating States (LEDs)	Color	Status
PWR	Blue	Power to module
COM	Green	Communication status
FLT	Red	Board fault
I/O	Red	Input/output status

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				 A Murrelektronik Company	Date	Name
Rev	Description	Date	Name		Originator	06.12.20
a	Initial release	08.07.20	FSa	Approved	08.07.20	FSa
				DP-32054-3_db_e_x.docx	The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.	

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CAN Control and Operation Message Summary			
Description	Function	PGN	SA
Control Message	Outputs	65523 (0xFF3)	n/a
Control Message	PWM 1 - 4	65308 (0xFF1C)	n/a
Control Message	PWM 5 - 8	65309 (0xFF1D)	n/a
Digital Inputs Message	Inputs	65301 (0xFF15)	252
A/D Message	A/D 1 - 4	65302 (0xFF16)	252
A/D Message	A/D 5 - 8	65303 (0xFF17)	252

Diagnostics and Status Message Summary			
Description	Function	PGN	SA
Diagnostics and Status	Status	65384 (0xFF44)	209

**DP Logic** **DPLogic™** User function / logic generating and programming tool for creating vehicle personality. Similar to Ladder Logic with user enhanced features for troubleshooting and diagnostics.

## P/N Matrix

Part No.	Description
32054	Valve Drive Module VDM0606 6 inputs / 6 outputs
32054-3	Valve Drive Module VDM0404 4 inputs / 4 outputs
32054-X	Customer-specific requirements for label / Logic program and I/O

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				<b>DATA PANEL</b> A Murrelektronik Company		Date	Name
					Originator	06.12.20	TMc
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a	Initial release	08.07.20	FSa	DP-32054-3_db_e_x.docx	The trademark DEUTSCH is owned by the TE Connectivity Ltd. family of companies.		