S-DIAS Pulse Width Module
PW 161

with 16 valve outputs

The S-DIAS PW 161 pulse width module has 16 valve outputs for valves with a starting current of up to 1 A and a 0.5 A stopping current. The 16 valve outputs are divided into two supply groups of 8 outputs each. Each supply group provides a current measurement for the switch point detection of the valve.

The supply voltages are monitored for under voltage.

Valve Outputs Specifications

	Number	16
	Execution	GND switching
	Short-circuit proof	yes
	Maximum starting current/channel	1 A
	Maximum stopping current/channel	0.5 A
	Maximum total current/group	4 A
	Brake voltage during shutdown	39 V
	Maximum braking energy of outputs (inductive load)	maximum 1 Joule/for all channels maximum 0.25 Joules/channel
	Turn-on delay	100 µs can be set through the software in 0-255 increments
	Excitation time	100 µs can be set through the software in 0-255 increments
	PWM frequency	20 kHz
	Current measurement/group	0-2 A 10-bit ADC 100 µs conversion time
	Derating variants	50 % starting ratio of all channels, 100 % simultaneity of all channels, 100 % of the maximum stopping current per channel. 100 % starting ratio of all channels, 50 % simultaneity of all channels, 100 % of the maximum stopping current per channel. 100 % starting ratio of all channels, 100 % simultaneity of all channels, 50 % of the maximum stopping current per channel.

Electrical Requirements

	Supply voltage of valve +UV /1-2 +UV /1-2	18-52 V DC	
	Current consumption of voltage supply +UV /1-2	corresponds to the load on the valve outputs	
	Voltage supply from S-DIAS bus	+24 V	
	Current consumption on the S-DIAS bus (+24 V power supply)	typically 45 mA	maximum 50 mA

Voltage Monitor

	Supply voltage +UV /1-2	Supply voltage > 18 V (corresponding DC OK-LED lights green)

Article Number and Miscellaneous

	Article number	20-030-161
	Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
	Standard	UL 508 (E247993)
	Approvals	UL, cUL, CE

Environmental Conditions

	Storage temperature	-20 ... +85 °C	
	Environmental temperature	0 ... +55 °C	
	Humidity	0-95 %, non-condensing	
	Operating conditions	pollution degree 2 altitude up to 2000 m	
	EMC resistance	in accordance with EN 61000-6-2 (industrial area)	
	EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
	Vibration resistance	EN 60068-2-6	3,5 mm von 5 Hz-8,4 Hz 1 g von 8,4 Hz-150 Hz
	Shock resistance	EN 60068-2-27	15 g
	Protection type	EN 60529	IP20