






I/O DIGITAL MODULES

	Z-D-IN	Z-D-OUT	Z-10-D-IN	Z-10-D-OUT	Z-D-I-O
					
	5 Digital Inputs module // RS485	5 Digital Outputs module // RS485	10 Digital Inputs module // RS485	10 Digital Outputs module // RS485	5 Digital Inputs / 2 Digital Output control module
ORDER CODE	Z-D-IN	Z-D-OUT	Z-10-D-IN	Z-10-D-OUT	Z-D-I-O
SIGNALS					
INPUTS / OUTPUTS / FEATURES	<ul style="list-style-type: none"> 5 opto-isolated inputs suitable for reed relays, proximity switches, npn & pnp and contact closure Counts up to 100Hz 1 fast count channel to 10KHz 16 bit totaliser for each channel Inputs protected from transients up to 600W/ms 5 - 250 ms anti-bounce filter 	<ul style="list-style-type: none"> 5 SPST N/O relay output module 5A @ 250Vac resistive loads 2A @ 250Vac inductive loads Maximum total current 12A per module - the rated capacity of the single common terminal Programmable comms failure state for relays Programmable delay, 50ms to 2.5 sec 	<ul style="list-style-type: none"> 10 opto-isolated inputs suitable for reed relays, proximity switches, npn & pnp and contact closure 8 inputs to 100Hz with 16 bit totalisers 2 inputs to 10KHz with 32 bit totalisers Operates in count, frequency, period and on or off time modes to 100Hz Operates in count or frequency mode to 10KHz 	<ul style="list-style-type: none"> 10 short circuit protected Mosfet output channels. Each output rated at 500mA from 6 to 35 Vdc Outputs protected against short circuit and overvoltage conditions Programmable comms failure state for outputs Diagnostic LEDs show output state, open circuit, overload 	<ul style="list-style-type: none"> 6 opto-isolated inputs contacts 2 relay 5 A, 250 Vac outputs "Stand-alone" operating mode: Z-D-I-O connected to motor controller device or valves "Distributed" operating mode, control logic from supervisory system "I/O" operating mode, ModBUS I/O functions
COMMUNICATION					
INTERFACE	2 wire RS485	2 wire RS485	2 wire RS485	2 wire RS485	2 wire RS485
PROTOCOL	ModBUS RTU Slave	ModBUS RTU Slave	ModBUS RTU Slave	ModBUS RTU Slave	ModBUS RTU Slave
SPEED	4800 to 57600 bps	4800 to 57600 bps	4800 to 57600 bps	4800 to 57600 bps	4800 to 57600 bps
COMMS DISTANCE (MAX)	1,200 m	1,200 m	1,200 m	1,200 m	1,200 m
SAMPLING TIME	300 ms	300 ms	200 / 400 ms	240 / 450 ms	
COMMUNICATION TIME		< 20 ms @ 38,400 Baud	< 20 ms @ 38,400 Baud	< 20 ms @ 38,400 Baud	< 20 ms @ 38,400 Baud
SOFTWARE & PROGRAMMING	<ul style="list-style-type: none"> Parameter setting Filter time, input type, Baud rate and address 	<ul style="list-style-type: none"> Parameter setting Delay, fail state, Baud rate and address 	<ul style="list-style-type: none"> Parameter setting Filter time, input type, Baud rate and address 	<ul style="list-style-type: none"> Parameter setting Filter time, fail state, Baud rate and address 	<ul style="list-style-type: none"> Motor / Valves control and alarms tasks
GENERAL DATA					
POWER SUPPLY	<ul style="list-style-type: none"> 19-40 Vdc (9 -30 opt.) 19-28 Vac, 50-60 Hz 	<ul style="list-style-type: none"> 19-40 Vdc (9 -30 opt.) 19-28 Vac, 50-60 Hz 	<ul style="list-style-type: none"> 19-40 Vdc (9 -30 opt.) 19-28 Vac, 50-60 Hz 	<ul style="list-style-type: none"> 19-40 Vdc (9 -30 opt.) 19-28 Vac, 50-60 Hz 	<ul style="list-style-type: none"> 10..40 Vdc 19..28Vac, 50..60 Hz
POWER CONSUMPTION	2.5 W	2.5 W	2.5 W	1.5 W	2 W
GALVANIC ISOLATION	1,500 Vac	1,500 Vac	1,500 Vac	1,500 Vac	Input // Supply (1.5 kV) Input // Outputs (3.75 kV)
FRONT PANEL INDICATION LEDS	<ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) 5 Input Status 	<ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) 5 Output Status 	<ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) 10 Input Status 	<ul style="list-style-type: none"> Power On Failure / Error Transmit Data (Tx) Receive Data (Rx) 10 Output Status 	<ul style="list-style-type: none"> Poer On Fail Transmit Data (Tx) Receive Data (Rx) 6 input status 2 output status
OPERATING TEMP.	0 to+55 °C	0 to+55 °C	0 to +55 °C	0 to +55 °C	0 to +60 °C
STORAGE	-20 to +70 °C	-20 to+70 °C	-20 to +70 °C	-20 to +70 °C	-20 to +70 °C
MAX HUMIDITY	30..90% @ + 40 °C non condensing	30..90% @ + 40 °C non condensing	30..90% @ + 40 °C non condensing	30..90% @ + 40 °C non condensing	30..90% @ + 40 °C non condensing
PROTECTION	IP20	IP20	IP20	IP20	IP20
CONNECTIONS	Screw clamp, plug in connectors, 2.5mm ² max	Screw clamp, plug in connectors, 2.5mm ² max	Screw clamp, plug in connectors, 2.5mm ² max	Screw clamp, plug in connectors, 2.5mm ² max	Screw clamp, plug in connectors, 2.5mm ² max
MOUNTING	35mm symmetrical DIN rail	35mm symmetrical DIN rail	35mm symmetrical DIN rail	35mm symmetrical DIN rail	35mm symmetrical DIN rail
DIMENSIONS	17.5 x 100 x 112 mm	17.5 x 100 x 112 mm	17.5 x 100 x 112 mm	17.5 x 100 x 112 mm	17.5 x 100 x 112 mm
HOT SWAPPING	yes	yes	yes	yes	yes
WEIGHT	200 g	200 g	200 g	200 g	200 g
STANDARDS	EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140/141, EN 61010-1	EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140/141, EN 61010-1	EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140/141, EN 61010-1	EN 50081-2, EN 55011, EN 50082-2, EN 61000-2-2/4, EN 50140/141, EN 61010-1	EN 61000-6-4/2002 (Emissioni), EN 61000-6-2/2002 (Immunità), EN 61010, IEC1131