Data Sheet

safety - control - motion - interface

DZ210

Monitor for direction of rotation and standstill

Product features:

- Simple and compact unit to monitor forward / reverse motion and standstill of machines
- Universal pulse inputs for use with all common incremental encoders and sensors (HTL, RS422 or TTL)
- Two potential-free changeover relay outputs as well as two fast-responding power transistor outputs
- Wide input frequency range (up to 500 kHz) and a fast response time (<1 msec. with f >1 kHz)
- Compact housing for simple snap fitting on top hat rails (EN 60715)
- Easy to set up by two front DIL switches
- 17 to 30 VDC power supply

Technical Specifications:		
Power supply:	Input voltage:	17 … 30 VDC
	Protection circuit:	reverse polarity protection
	Ripple:	≤ 10 % bei 24 VDC
	Consumption:	approx. 30 mA (unloaded)
	Connections:	screw terminal, 1.5 mm² / AWG 16
Encoder supply:	Output voltage:	approx. 5.4 V
	Output current:	max. 200 mA
	Connections:	screw terminal, 1.5 mm² / AWG 16
Incremental input:	Characteristic:	PNP, NPN
	Level:	RS422: Differential voltage > 1 V TTL: LOW 0 … 0.5 V, HIGH 2.5 … 5 V HTL: LOW 0 … 4 V, HIGH 9 … 30 V
	Channels:	A, /A, B, /B or A, B
	Frequency:	RS422 and TTL: max. 500 kHz (symmetrical) HTL and TTL: max. 350 kHz (asymmetrical)
	Internal resistance:	RS422 and TTL: Ri ≈ 10 kOhm HTL: Ri ≈ 4.7 kOhm
	Connections:	screw terminal, 1.5 mm² / AWG 16
Relay outputs:	Number of relays:	2 potential free changeovers
	Switching capacity:	30 VDC / 2 A or 115 VAC / 0.6 A or 230 VAC / 0.3 A
	Switching delay:	approx. 5 ms
	Connections:	screw terminal, 1.5 mm² / AWG 16
Transistor outputs:	Number of outputs:	2
	Type:	High-Side-Driver
	Switching voltage:	7 … 30 V
	Switching current:	max. 350 mA
	Switching delay:	approx. 200 µs
	Protection circuit:	durable short circuit proof (not both outputs at the same time)
	Connections:	screw terminal, 1.5 mm² / AWG 16
Housing:	Material:	plastic
	Mounting:	35 mm top hat rail (according to EN 60715)
	Dimensions (w x h x d):	22.5 x 102 x 102 mm / 0.8858 x 4.0157 x 4.0157 inch
	Protection class:	IP20
	Weight:	approx. 100 g
Ambient temperature:	Operation:	0 °C … +45 °C / +32 … +113 °F (not condensing)
	Storage:	-25 °C … +70 °C / -13 … +158 °F (not condensing)
Failure rate:	MTBF in years:	91.5 a (long-term usage at 60 °C / 140 °F)
Conformity & standards:	EMC 2004/108/EC:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
	LV 2006/95/EC:	EN 61010-1
	RoHS 2011/65/EU:	EN 50581