

SLPMR14-410 Safety Technology – Receiver Integrated Muting Function



Technical data

ID3084464Optical dataFunctionLight screenOptical resolution14 mmRange07000 mmScan field410 mmNumber of beams21With muting functionyesScan CodeAdjustableElectrical data2028 VDCOperating voltage2028 VDCResidual ripple< 10 % UssDC rated operational current≤ 150 mACurrent consumption non-actuated≤ 150 mAMax. current safe output500 mAShort-circuit protectionyesQutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 msWith restart interlockyesBlanking functionyes	Туре	SLPMR14-410
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Number of beams21With muting functionyesScan CodeAdjustableElectrical data 2028 VDCOperating voltage 2028 VDCResidual ripple< 10 % Uss	Range	07000 mm
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Electrical dataOperating voltage2028 VDCResidual ripple< 10 % Uss	With muting function	yes
Operating voltage2028 VDCResidual ripple< 10 % Uss	Scan Code	Adjustable
Residual ripple< 10 % UssDC rated operational current \leq 150 mACurrent consumption non-actuated \leq 150 mANo-load current \leq 275 mAMax. current safe output500 mAShort-circuit protectionyesReverse polarity protectionyesOutput function $2 \times NC$ (normally closed), $2 \times PNP$ Current output 0500 mANumber of safe semiconductor outputs 2 Response time typical< 13.5 ms	Electrical data	
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Current consumption non-actuated \leq 150 mANo-load current \leq 275 mAMax. current safe output500 mAShort-circuit protectionyesReverse polarity protectionyesOutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	Residual ripple	< 10 % U _{ss}
No-load current≤ 275 mAMax. current safe output500 mAShort-circuit protectionyesReverse polarity protectionyesOutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	DC rated operational current	≤ 150 mA
Max. current safe output500 mAShort-circuit protectionyesReverse polarity protectionyesOutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	Current consumption non-actuated	≤ 150 mA
Short-circuit protectionyesReverse polarity protectionyesOutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	No-load current	≤ 275 mA
Reverse polarity protectionyesOutput function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	Max. current safe output	500 mA
Output function2 x NC (normally closed), 2 × PNPCurrent output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	Short-circuit protection	yes
Current output0500 mANumber of safe semiconductor outputs2Response time typical< 13.5 ms	Reverse polarity protection	yes
Number of safe semiconductor outputs 2 Response time typical < 13.5 ms	Output function	2 x NC (normally closed), 2 × PNP
Response time typical< 13.5 msWith restart interlockyes	Current output	0500 mA
With restart interlock yes	Number of safe semiconductor outputs	2
	Response time typical	< 13.5 ms
Blanking function yes	With restart interlock	yes
	Blanking function	yes

Features

- Electrical connection via RDLP-8 with open end or via DELPE-8 with male M12 x 1, 8pin
- Protection class IP65
- Flat housing without blind zone
- Adjustments via DIP switch
- Resolution can be reduced
- Blanking function
- Operating voltage: 24 VDC ± 15 %
- Resolution 14 mm
- Scan field 410 mm (L1)
- Mounting bracket included in delivery

Wiring diagram

_	2 BN	+
44	3 GNYE	GND/PE
L	1 WH	OSSD2
	11 BK	OSSD1
	4 YE	M1
	5 GY	M2
	6 PK	OR2/ME
	7 BU	-
	8 RD	AUX/FAULT
	9 OG	EDM
	10	n.c.
	12 VT	Reset/OR1
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Functional principle

The high-resolution safety light screen is emitter and receiver in one without blind zone. As the system is optically synchronized, emitter/receiver wiring is superfluous. The receiver's safety switching outputs are directly connected to a load relay (e.g. IM-T-9A) and trigger an immediate stop of dangerous machine cycles. Personnel safety category PLe acc. to ISO 13849-1 is fulfilled through 2-channel monitoring of the switching device and the principle of diverse redundancy by which two processors control each other mutually.



Technical data

Mechanical data	
Design	Rectangular, EZ-Screen LP
Dimensions	26 x 28 x 410 mm
Housing material	Metal, AL, Yellow polyester
Lens	plastic, Acryl
Cascadable	No
Electrical connection	Cable entry for flat connector
Ambient temperature	0+55 °C
Protection class	IP65
Power-on indication	LED, Green
Switching state	2-color LED, Red
Tests/approvals	
Vibration resistance	10–55 Hz at 0.35 mm
Shock test	10 g at 16 ms (6000 cycles)
Approvals	CE, cTUVus