



## eloProg relay modules 485EPR

The expansion modules with relay outputs have up to 4 force-guided NO relay contacts. They have been designed to handle 6A and 240V AC. In addition, up to 8 electronic control outputs are available for diagnostics.

### Technical specifications

- Up to 4 safe, redundant relay outputs (NO contacts)
- Diagnostics via up to 4 configurable control outputs and LEDs
- Up to 4 EDM inputs for monitoring of downstream contactors or connection of a start push button
- EDM output for return to base or output module
- Depending on the variant, connection to the base module and other expansion modules with pre-assembled T-connector (proprietary 5-waybus) or wiring via connection terminals

Technical drawing

IMAGE 1/1



## Product options

IMAGE 1/1

### ORDERING KEY

485EP	R			Relay module
		02		2 safe relay outputs
		04		4 safe relay outputs
		04	S08B	4 safe relay outputs / 8 status outputs – bus-compatible

## Article characteristics

Attribute	485EPR02	485EPR04	485EPR04S08B
Utilization category	AC-15 / DC-13		-
DC	Depending on the configuration %		
Connection to output module	-		via connection terminals
Min. switching voltage at safety output	10 V DC		
Max. switching voltage at safety output	250 V DC		
Min. switching voltage at safety output	10 V AC		
Max. switching voltage at safety output	400 V AC	230 V AC	400 V AC
Min. switching current at safety output	0.02 A		
Max. switching current at safety output	6 A		
Max. switching current at control output	-		0.1 A
Response time	12 ms		
Number of relay safety outputs	2	4	
Number of relay control outputs	-		8
Feedback circuit	yes		Depending on the configuration
Operating voltage min.	19.2 V DC		
Operating voltage max.	28.8 V DC		
Power consumption	3 W		
LED display	single-coloured		No
PL acc. to EN ISO 13849-1	e		
SIL acc. to IEC 61508	3		
SIL CL acc. to IEC 62061	3		
PFHD according to IEC 61508	depending on the configuration 1/h		1,30 x 10 <sup>-9</sup> 1/h
Safe Failure Fraction (SFF) to IEC 61508	-		99.7 %
Operating life	20 Tm		
Max no operating cycles at 1A switching current AC15 230V(B10d)	750000		-

Attribute	485EPR02	485EPR04	485EPR04S08B
Max no operating cycles at 2A switching current DC13 24V (B10d)	10000000		-
Max no operating cycles at 3A switching current AC15 230V(B10d)	300000		-
Service life, mechanical (Cycles)	> 20 x 10 <sup>6</sup>		> 40 x 10 <sup>6</sup>
Dimensions	108 x 22,5 x 114,5 mm (H/B/T)		
Housing material	PA		
Housing colour	Gehaeuse schwarz Frontplatte gelb		
Protection class, housing	IP20 DIN EN 60529		IP54 DIN EN 60529
Operating temperature min.	-10 °C		
Max. operating temperature	55 °C		
Min. storage temperature	-20 °C		
Max. storage temperature	85 °C		
Relative humidity	10...95 %		
Mounting type	Mounting rail		
Weight	181 g	231 g	255 g
Torque for connection terminals	0.6 N m		
Connection to base module	via connection terminals		proprietary 5-way bus (T-connector)
Screw terminals	yes		
Pluggable connection terminals	yes		
Min. connection cross section	0.5 mm <sup>2</sup>		
Max. connection cross section	2.5 mm <sup>2</sup>		
Certified in accordance with	EN ISO 13849-1 IEC 61508 IEC 62061 UL 508 / CSA 22.2		-
CE label	yes		