

Specifications, continued

Utilization Category	
Inductive: AC-15	DI: 3 A/250V AC SI/CI: 1.5 A/250V AC EM/EMD: 1.5 A/250V AC
Inductive: DC-13	DI: 4 A/24V DC (0.1 Hz) SI/CI: 2 A/24V DC (0.1 Hz) EM/EMD: 2 A/24V DC
Output Rating	DIS: 14, 24: 1.5 A each 34, 44: 0.5 A each GLP: X14, X24: 0.5 A each 51, L61: 0.3 A each
Environmental and Physical Characteristics	
Enclosure Type Rating/ Terminal Protection	IP40 (NEMA 1)/IP20
Operating Temperature [C (F)]	-5...+55 ° (23...131 °)
Vibration	10...55 Hz, 0.35 mm
Shock	10 g, 16 ms 100 shocks
Mounting	35 mm DIN Rail
Weight [g (lb)]	DI: 180 (0.40) DIS: 150 (0.33) SI: 150 (0.33) CI: 225 (0.5) GLP: 150 (0.33) EM: 225 (0.50) EMD: 220 (0.49)
Terminals	Removable (Screw)
Conductor Size, Max.	0.2...4 mm ² (24...12 AWG)

Product Selection Safety Relays

Relay Type	No. of Inputs	Inputs	Immediate Safety Outputs	Delayed Safety Outputs	Time Delay	Immediate Auxiliary Outputs	Power Supply	Cat. No.
Dual Input (DI)	2 dual- channel	1 N.C., 2 N.C., OSSD, Safety Mat	2 N.O.	—	—	1 S.S.	24V	440R-D22R2
Dual Input Solid-State Output (DIS)			2 S.S.					440R-D22S2
Single Input (SI)	1 dual- channel	1 N.C., 2 N.C., OSSD, Safety Mat	2 N.O.	—	—	1 S.S.	24V	440R-S12R2
Compatible Input (CI)			3 N.O.					440R-S13R2
Guardlocking Proximity (GLP)	1 dual- channel 2 PNP	2 N.C., OSSD	2 S.S.	—	—	1 S.S.	24V	440R-GL2S2P
Expansion Module (EM)	1 single-wire safety	—	4 N.O.	—	—	1 S.S.	24V	440R-EM4R2
Expansion Module Time Delayed (EMD)			—	—	100 ms ... 300 s on or off delay 100 ms ... 20 s jog			440R-EM4R2D

Accessories

Description	Cat. No.
Bag of four, 4-pin screw terminals	440R-ATP4

Functional Safety Data ★

Note: Subject to change. For up-to-date information, visit
<http://www.ab.com/safety/>

MTTFd		PFH _D
DI	355 yr	4.35 x 10 ⁻⁹
DIS	484 yr	4.39 x 10 ⁻⁹
SI	262 yr	3.98 x 10 ⁻⁹
CI	164 yr	4.26 x 10 ⁻⁹
GLP	395 yr	7.18 x 10 ⁻⁹
EM	190 yr	1.81 x 10 ⁻⁹
EMD	165 yr	4.4 x 10 ⁻⁹

★ Usable for ISO 13849-1: 2006 and IEC 62061. Data is based on the following assumptions:
 - Mission time/proof test interval of 20 yr
 - Functional test at least once within six-month period
 - The PFH_D given is the sum of the PFH_D of the electronic aspects and the PFH_D resulting from the B10d values of the two output relays based on 1 operation/hour, 365 days a year, 24 hours a day (8760 operations/year) at AC15 1 A 230V AC or at DC13 1.5 A 24V DC.

LED Indicators

Indicator on Housing	Function	LED Color(s)
PWR/FAULT	Status and diagnostics	Green/Red
IN1	Status of safety output IN1	Green
IN2	Status of safety output IN2	Green
LOGIC IN	Status of single wire safety input	Green
OUT	Status of safety output	Green
LOCK‡	Status of the lock command	Green
B1★	Status and diagnostics	Green

‡ GLP only
 ★ B1 on EMD only