Data sheet



SIPLUS LOGO! DM16 24R -40...+70 °C start up -25°C with conformal coating based on 6ED1055-1NB10-0BA2 . Expansion module, PS/I/O: 24 V DC/24 V DC/relay, 8 DI/8 DO, 4 MW for LOGO! 8

Figure similar

Installation type/mounting		
Mounting	on 35 mm DIN rail, 4 spacing units wide	
Supply voltage		
Rated value (DC)		
• 24 V DC	Yes	
permissible range, lower limit (DC)	20.4 V	
permissible range, upper limit (DC)	28.8 V	
Rated value (AC)		
• 24 V AC	No	
Digital inputs		
Number of digital inputs	8	
Input voltage		
 Type of input voltage 	DC	
• for signal "0"	< 5 V DC	
• for signal "1"	> 12 V DC	
Input current		
for signal "0", max. (permissible quiescent current)	0.85 mA	
● for signal "1", typ.	3.5 mA	
Input delay (for rated value of input voltage)		
for standard inputs		
— at "0" to "1", max.	1.5 ms	
— at "1" to "0", max.	1.5 ms	
Digital outputs		
Number of digital outputs	8; Relays	
Short-circuit protection	No	
Controlling a digital input	Yes	
Switching capacity of the outputs		
● on lamp load, max.	1 000 W	
Output current		
● for signal "1" rated value	5 A	
for signal "1" minimum load current	100 mA	
Parallel switching of two outputs		
for uprating	No	
Switching frequency		
with resistive load, max.	2 Hz	
 with inductive load, max. 	0.5 Hz	

mechanical, max.	10 Hz
Relay outputs	
Switching capacity of contacts	
— with inductive load, max.	3 A
— with resistive load, max.	5 A
EMC	
Emission of radio interference acc. to EN 55 011	
Limit class B, for use in residential areas	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay
At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	E 000
Installation altitude above sea level, max. Ambient air temperature baremetric procesure.	5 000 m Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin
 Ambient air temperature-barometric pressure- altitude 	(Tmax - 10 K) at 795 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
Relative humidity	
With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	V 01 000 11 (1 1 1 1 1 1 1 1 1 1 1 1 1 1
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 to mechanically active substances according to EN 60721-3-3 	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
 to biologically active substances according to EN 60721-3-6 	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
 to chemically active substances according to EN 60721-3-6 	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 to mechanically active substances according to EN 60721-3-6 	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
 Against chemically active substances acc. to EN 60654-4 	Yes; Class 3 (excluding trichlorethylene)
 Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
 Coatings for printed circuit board assemblies acc. to EN 61086 	Yes; Class 2 for high reliability
 Protection against fouling acc. to EN 60664-3 	Yes; Type 1 protection
 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Discoloration of coating possible during service life
 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	Yes; Conformal coating, Class A
Dimensions	

Width	71.5 mm
Height	90 mm
Depth	58 mm

last modified: 1/16/2021 **C**