## **SIEMENS**

## **Data sheet**



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

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	
<ul> <li>Type of input voltage</li> </ul>	DC
• for signal "0"	< 5 V DC
● for signal "1"	> 12 V DC
Input current	
<ul><li>for signal "0", max. (permissible quiescent current)</li></ul>	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	<u>,                                      </u>
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	
<ul><li>for signal "1" rated value</li></ul>	5 A
for signal "1" minimum load current	100 mA
Parallel switching of two outputs	
for uprating	No
Switching frequency	
<ul><li>with resistive load, max.</li></ul>	2 Hz
<ul> <li>with inductive load, max.</li> </ul>	0.5 Hz
mechanical, max.	10 Hz
Relay outputs	

Outliebing and the standards	
Switching capacity of contacts	2 A
with inductive load, max.      with resistive load, max.	3 A 5 A
EMC	
Emission of radio interference acc. to EN 55 011	
Limit class B, for use in residential areas	Yes
Degree and class of protection	, 30
IP degree of protection	IP20
Ambient conditions	11 20
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	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m
Ambient air temperature-barometric pressure- altitude	Tmin Tmax at 1 140 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  to mechanically active substances according to	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)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA- 71.04</li> </ul>	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	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes; Class 2 for high reliability
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A
Dimensions	
Width	71.5 mm

Height	90 mm
Depth	58 mm
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