## **SIEMENS**

## Data sheet

## 6AG1055-1FB00-7BA2

SIPLUS LOGO! DM8 230 V -40...+70°C start up -25°C with conformal coating based on 6ED1055-1FB00-0BA2 . Expansion module, PS/I/O: 230V/230V/relay, 2 MW, 4 DI/4 DO for LOGO! 8



Figure similar

Installation type/mounting		
Mounting	on 35 mm DIN rail, 2 spacing units wide	
Supply voltage		
Rated value (DC)		
• 115 V DC	Yes	
• 230 V DC	Yes	
permissible range, lower limit (DC)	100 V	
permissible range, upper limit (DC)	253 V	
Rated value (AC)		
• 115 V AC	Yes	
• 230 V AC	Yes	
Line frequency		
• permissible range, lower limit	47 Hz	
<ul> <li>permissible range, upper limit</li> </ul>	63 Hz	
Digital inputs	4	
Number of digital inputs	4	

• Type of input voltage       AC/DC         • for signal "0"       < 40 V AC, < 30 V DC         • for signal "1"       > 79 V AC, < 79 V DC         Input current       • for signal "0", max. (permissible quiescent current)       0.06 mA; 0.05 mA with AC, 0.06 mA with DC         • for signal "1", hyp.       0.37 mA         Input delay (for rated value of input voltage)       for standard inputs         - at "0" to "1", max.       40 ms         - at "1" to "0", max.       75 ms         Digital outputs       4, Relays         Number of digital outputs       4, Relays         Short-clicuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       1000 W; 500 W at 115V AC         • for signal "1" minimum load current       100 mA         • for uprating       No         Switching requency       • with inductive load, max.         • with inductive load, max.       2 Hz         • with inductive load, max.       3 A         - with resistive load, max.       5 A         • with inductive load, max.       5 A		
if or signal "0"       < 40 V AC, < 30 V DC	Input voltage	
<ul> <li>for signal "1" &gt; 79 V AC, &gt; 79 V DC</li> <li>Input current</li> <li>Or signal "0", max. (permissible quiescent current)</li> <li>for standard inputs</li> <li>- et "0" to "1", max.</li> <li>- et "0" to "1", max.</li> <li>- et "1" to "0", max.</li> <li>- et "1" to "1", max.</li> <li>- et "1" to "1", max.</li> <li>- et "1" to "1", max.</li> <li>- et</li></ul>	<ul> <li>Type of input voltage</li> </ul>	
Input current       0.06 mA; 0.05 mA with AC, 0.06 mA with DC         ourrent)       0.37 mA         Input delay (for rated value of input voltage)       0.37 mA         for signal "1", typ.       0.37 mA         Input delay (for rated value of input voltage)       40 ms         - at "0" to "1", max.       40 ms         - at "0" to "1", max.       75 ms         Digital outputs       4; Relays         Nomber of digital outputs       4; Relays         Short-circuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       000 mA         • for signal "1" rated value       5 A         • for uprating       No         Switching frequency       •         • with resistive load, max.       0.5 Hz         • with resistive load, max.       0.5 Hz         • with resistive load, max.       5 A         • with resistive load, max.       5 A         • with resistive load, max.       5 A         = with inductive load, max.	● for signal "0"	< 40 V AC, < 30 V DC
• for signal "0", max. (permissible quiescent current)         0.06 mA; 0.05 mA with AC, 0.06 mA with DC           • for signal "1", typ.         0.37 mA           Input delay (for rated value of input voltage)         6           for standard inputs         40 ms           - at "0" to "1", max.         40 ms           - at "1" to "0", max.         75 ms           Digital cutputs           At Relays           Short-circuit protection         No           Controlling a digital input         Yes           Switching capacity of the outputs         000 W; 500 W at 115V AC           Output current         1000 W; 500 W at 115V AC           Output current         100 mA           Parallel switching frequency         infor signal "1" minimum load current           • for signal "1" minimum load current         100 mA           Parallel switching frequency         inth resistive load, max.           • with resistive load, max.         0.5 Hz           • with inductive load, max.         0.5 Hz           • with resistive load, max.         3.A           - with resistive load, max.         5.A           Emission of radio Interference acc. to EN 55 011         •           • Limit class B, for use in residential areas         Yes           Degree and cl	● for signal "1"	> 79 V AC, > 79 V DC
current)       • for signal "1", typ.       0.37 mA         Input delay (for rated value of input voltage)       •         for standard inputs       -         - at "0" to "1", max.       40 ms         - at "1" to "0", max.       75 ms         Digital outputs       4; Relays         Number of digital outputs       4; Relays         Short-circuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       5 A         • on lamp load, max.       1000 W; 500 W at 115V AC         Output current       100 mA         • for signal "1" minimum load current       100 mA         Parallel switching of two outputs       •         • for signal "1" minimum load current       100 mA         Parallel switching of two outputs       •         • for signal "1" minimum load current       100 mA         Parallel switching of two outputs       •         • with inductive load, max.       0.5 Hz         • with inductive load, max.       10 Hz         Relay outputs       SA         Switching capacity of contacts       •         - with inductive load, max.       5 A         Emission of radio interference acc. to EN 55 011       •	Input current	
<ul> <li>for signal "1", typ.</li> <li>0.37 mA</li> <li>Input delay (for rated value of input voltage)</li> <li>for standard inputs</li> <li>- at "0" to "1", max.</li> <li>40 ms</li> <li>- at "1" to "0", max.</li> <li>75 ms</li> <li>Digital outputs</li> <li>Number of digital outputs</li> <li>4: Relays</li> <li>Short-circuit protection</li> <li>No</li> <li>Controlling a digital input</li> <li>Yes</li> <li>Switching capacity of the outputs</li> <li>on lamp load, max.</li> <li>1000 W; 500 W at 115V AC</li> <li>Output current</li> <li>for signal "1" rated value</li> <li>5 A</li> <li>for signal "1" rated value</li> <li>5 A</li> <li>for signal "1" rated value</li> <li>So an amp load, max.</li> <li>1000 mA</li> <li>Paratele switching frequency</li> <li>with resistive load, max.</li> <li>0.5 Hz</li> <li>with inductive load, max.</li> <li>0.5 Hz</li> <li>with inductive load, max.</li> <li>0.5 Hz</li> <li>with resistive load, max.</li> <li>0.5 Hz</li> <li>with resistive load, max.</li> <li>5 A</li> <li>Emechanical, max.</li> <li>5 A</li> <li>Emission of radio interference acc. to EN 55 011</li> <li>Limit class B, for use in residential areas</li> <li>Yes</li> <li>Degree of protection acc. to EN 6529</li> <li>IP20</li> <li>Yes</li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Yes</li> </ul>		0.06 mA; 0.05 mA with AC, 0.06 mA with DC
Insut delay (for rated value of input voltage)     Input delay (for rated value of input voltage)       for standard inputs     40 ms		0.37 mA
for standard inputs		
at "1" to "0", max.     75 ms       Digital outputs     4; Relays       Number of digital outputs     4; Relays       Short-circuit protection     No       Controlling a digital input     Yes       Switching capacity of the outputs     000 W; 500 W at 115V AC       Output current     1000 mA       • for signal "1" rated value     5 A       • for uprating     No       Switching frequency     •       • with inductive load, max.     0.5 Hz       • with inductive load, max.     0.5 Hz       • with inductive load, max.     10 Hz       Relay outputs     Switching capacity of contacts       - with resistive load, max.     3 A       - with inductive load, max.     5 A       EMC     Emission of racio interference acc. to EN 55 011       • Limit class B, for use in residential areas     Yes       Degree and class of protection     Peres       Degree of protection acc. to EN 60529     Yes       • [20     Yes       Standards, approvals, certificates     CE mark       CE mark     Yes		40 ms
Digital outputs       4; Relays         Number of digital outputs       4; Relays         Short-circuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       1 000 W; 500 W at 115V AC         Output current       5 A         • for signal "1" rated value       5 A         • for signal "1" rated value       5 A         • 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         Degree and class of protection       Degree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates       CE mark         CE mark       Yes		
Number of digital outputs       4; Relays         Short-circuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       1000 W; 500 W at 115V AC         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       SA         Switching capacity of contacts       -         - with inductive load, max.       5 A         - with inductive load, max.       5 A         - with inductive load, max.       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       Pagee of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes		70110
Short-circuit protection       No         Controlling a digital input       Yes         Switching capacity of the outputs       1000 W; 500 W at 115V AC         Output current       5 A         • for signal "1" rated value       5 A         • for signal "1" minimum load current       100 mA         Parallel switching of two outputs       00 mA         • 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.       5 A         - with inductive load, max.       5 A         EMC       Emission of radio interference acc. to EN 55 011         • Limit class B, for use in residential areas       Yes         Degree of protection acc. to EN 60529       Yes         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes	Digital outputs	
Controlling a digital input       Yes         Switching capacity of the outputs       1 000 W; 500 W at 115V AC         Output current       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       Sa         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         Degree of protection acc. to EN 60529       -         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes	Number of digital outputs	4; Relays
Switching capacity of the outputs         • on lamp load, max.       1 000 W; 500 W at 115V AC         Output current       5 A         • 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.       5 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         Degree and class of protection       Degree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates       CE mark         CE mark       Yes	Short-circuit protection	No
• on lamp load, max.       1 000 W; 500 W at 115V AC         Output current       5 A         • 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 inductive load, max.       5 A         - with inductive load, max.       5 A         EMC       Emission of radio interference acc. to EN 55 011         • Limit class B, for use in residential areas       Yes         Degree of protection acc. to EN 60529       -         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes	Controlling a digital input	Yes
Output current       5 A         • for signal "1" rated value       5 A         • for signal "1" minimum load current       100 mA         Parallel switching of two outputs       100 mA         • for uprating       No         Switching frequency       Vert         • with resistive load, max.       2 Hz         • with inductive load, max.       0.5 Hz         • mechanical, max.       10 Hz         Relay outputs       Vert         Switching capacity of contacts       3 A         - with inductive load, max.       5 A         - with inductive load, max.       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       Vertices         Degree of protection acc. to EN 60529       Yes         • IP20       Yes         Standards, approvals, certificates       CE mark         CE mark       Yes	Switching capacity of the outputs	
• for signal "1" rated value5 Å• for signal "1" minimum load current100 mAParallel switching of two outputs•• for upratingNoSwitching frequency•• with resistive load, max.2 Hz• with inductive load, max.0.5 Hz• mechanical, max.10 HzRelay outputsSwitching capacity of contacts- with inductive load, max.3 Å- with resistive load, max.5 ÅEMCEmission of radio interference acc. to EN 55 011• Limit class B, for use in residential areasYesDegree of protection acc. to EN 60529 • IP20YesStandards, approvals, certificatesYesCE markYesCSA approvalNo	• on lamp load, max.	1 000 W; 500 W at 115V AC
<ul> <li>Intervention of the second seco</li></ul>	Output current	
Parallel switching of two outputs       No         • for uprating       No         Switching frequency       2 Hz         • 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         Degree and class of protection       Peree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes	<ul> <li>for signal "1" rated value</li> </ul>	5 A
• for uprating       No         Switching frequency       2 Hz         • 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         Degree and class of protection       Pegree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes         No       No	<ul> <li>for signal "1" minimum load current</li> </ul>	100 mA
Switching frequency       2 Hz         • with resistive 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         Degree and class of protection       Yes         Standards, approvals, certificates       Yes         CE mark       Yes         CSA approval       Yes	Parallel switching of two outputs	
• 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         Degree and class of protection       Yes         Estandards, approvals, certificates       Yes         CE mark       Yes         CSA approval       Yes	• for uprating	No
<ul> <li>with inductive load, max.</li> <li>with inductive load, max.</li> <li>mechanical, max.</li> <li>10 Hz</li> <li>Relay outputs</li> <li>Switching capacity of contacts         <ul> <li>with inductive load, max.</li> <li>With resistive load, max.</li> <li>A</li> <li>with resistive load, max.</li> <li>S A</li> </ul> </li> <li>EMC</li> <li>Emission of radio interference acc. to EN 55 011         <ul> <li>Limit class B, for use in residential areas</li> <li>Yes</li> </ul> </li> <li>Degree and class of protection         <ul> <li>Degree of protection acc. to EN 60529             <ul> <li>IP20</li> <li>Yes</li> </ul> </li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Yes</li> <li>No</li> </ul> </li></ul>	Switching frequency	
• mechanical, max.         10 Hz           Relay outputs         Switching capacity of contacts	<ul> <li>with resistive load, max.</li> </ul>	2 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         Degree and class of protection         Degree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates         CE mark       Yes         No	<ul> <li>with inductive load, max.</li> </ul>	0.5 Hz
Switching capacity of contacts       3 A         - 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         Degree and class of protection       Yes         0       IP20         Yes       Standards, approvals, certificates         CE mark       Yes         Ocs A approval       No	• mechanical, max.	10 Hz
with inductive load, max.3 A with resistive load, max.5 AEMCEmission of radio interference acc. to EN 55 011• Limit class B, for use in residential areasYesDegree and class of protectionDegree of protection acc. to EN 60529• IP20YesStandards, approvals, certificatesCE markYesCSA approvalNo	Relay outputs	
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       Degree and class of protection     Ves       Degree of protection acc. to EN 60529     Yes       • IP20     Yes       Standards, approvals, certificates     Yes       CE mark     Yes       No     No	Switching capacity of contacts	
EMC       Yes         Emission of radio interference acc. to EN 55 011       • Limit class B, for use in residential areas       Yes         Degree and class of protection       Degree of protection acc. to EN 60529       • IP20         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes         No       No	— with inductive load, max.	3 A
Emission of radio interference acc. to EN 55 011         • Limit class B, for use in residential areas       Yes         Degree and class of protection         Degree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates         CE mark       Yes         CSA approval       No	— with resistive load, max.	5 A
Emission of radio interference acc. to EN 55 011         • Limit class B, for use in residential areas       Yes         Degree and class of protection         Degree of protection acc. to EN 60529         • IP20       Yes         Standards, approvals, certificates         CE mark       Yes         CSA approval       No		
• Limit class B, for use in residential areas       Yes         Degree and class of protection          Degree of protection acc. to EN 60529       Yes         • IP20       Yes         Standards, approvals, certificates       Yes         CE mark       Yes         CSA approval       No		
Degree and class of protection       Degree of protection acc. to EN 60529       • IP20       Yes       Standards, approvals, certificates       CE mark     Yes       CSA approval     No		Vec
Degree of protection acc. to EN 60529     Yes       • IP20     Yes       Standards, approvals, certificates       CE mark     Yes       CSA approval     No	<ul> <li>Limit class B, for use in residential areas</li> </ul>	Yes
<ul> <li>IP20</li> <li>Yes</li> <li>Standards, approvals, certificates</li> <li>CE mark</li> <li>Yes</li> <li>CSA approval</li> <li>No</li> </ul>		
Standards, approvals, certificates       CE mark     Yes       CSA approval     No	Degree of protection acc. to EN 60529	
CE mark     Yes       CSA approval     No	• IP20	Yes
CSA approval No		
Na Na		
OL approval NO	UL approval	No

FM approval	No
developed in accordance with IEC 61131	Yes
according to VDE 0631	Yes
Marine approval	No

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 or max. total current 10 A
• At cold restart, min.	-25 °C
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>	2 000 m
<ul> <li>Ambient air temperature-barometric pressure- altitude</li> </ul>	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m)
Relative humidity	
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
<ul> <li>Resistant to commercially available coolants and lubricants</li> </ul>	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
<ul> <li>— to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>— to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
<ul> <li>— to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
<ul> <li>— to chemically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2- 52 (severity degree 3); *
<ul> <li>— to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
Remark	
<ul> <li>— Note regarding classification of environmental conditions acc. to EN 60721</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 availability

• Military testing according to MIL-I-46058C,

## Amendment 7

Dimensions	
Width	35.5 mm
Height	90 mm
Depth	58 mm
last modified:	12/25/2018