SIEMENS

Product data sheet 6AG1132-6BD20-7BA0



SIPLUS ET 200SP, DIGITAL OUTPUT MODULE, DQ 4X24VDC/2A STANDARD, -40 ... +70 DEGREES C WITH CONFORMAL COATING BASED ON 6ES7132-6BD20-0BA0 . FITS TO BU-TYPE A0, COLOR CODE CC02, MODULE DIAGNOSIS

General information	
Product function	
I&M data	Yes
Engineering with	
STEP 7 TIA Portal configurable/integrated as of version	V11 SP2 with HSP0024 / -
STEP 7 configurable/integrated as of version	V5.5 SP2 with GSD file / -
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	60 mA; without load
Power loss	
Power loss, typ.	1 W
Address area	
Address space per module	
Address space per module, max.	1 byte

Short-dirouit protection Response threshold, typ. Response threshold, typ. 2.8 to 5.2 A Limitation of Inductive shutdown voltage to Controlling a digital input With resistive load, max. on lamp load, max. 10 W Load resistance range lower limit 12 \(\Omega \) Unper limit 3400 \(\Omega \) Output current for signal "1" rated value for signal "0" residual current, max. 0.1 mA Output delay with resistive load "1" to "0", max. 1" to "0", max. 1" to "0", max. 2 Hz With resistive load, max. 100 Hz Switching frequency with resistive load, max. 2 Hz on lamp load, max. 100 Hz Cable length Cable length unshielded, max. 2 Load residual current of the outputs Max. current per module 8 A Cable length unshielded, max. 2 Load residual current of the outputs Switchronous mode (epplication synchronized up to terminal) Ves Load residual current of the outputs Load residual current of the outputs Max. current per module 8 A Cable length unshielded, max. 2 Load residual current of the outputs Load current of the outputs L	Digital outputs	
Response threshold, typ. 2.8 to 5.2 A	Number of digital outputs	4; > +60 °C number of simultaneously controllable outputs max. 2 x 0.25 A or max. 4 x 0.125 A, max. total current 0.5 A
Limitation of inductive shutdown voltage to Controlling a digital input with resistive load, max. on lamp load, max. Doad resistance range lower limit 12 \(\Omega \) con signal "1" rated value for signal "1" rated value for signal "0" residual current, max. 0.1 mA Coutput delay with resistive load "0" to "1", max. "1" to "0", max. "1" to "0", max. 100 Hz with resistive load, max. 0 100 Hz with resistive load "0" to signal "0" residual current, max. 100 µs Parallel switching of 2 outputs for uprating for regular switching of 2 outputs for uprating for deal output output of a load Ves Switching frequency with resistive load, max. 100 Hz with inductive load, max. 100 Hz with inductive load, max. 100 Hz Cable length Cable length Cable length shielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitier, max. terrupts/diagnostics/status information Substitute values connectable Ves Alarms	Short-circuit protection	Yes
Controlling a digital input with resistive load, max. on lamp load, max. load resistance range lower linit upper limit upper limit for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load "0" to "1", max. "1" to "0", max. 100 µs Parallel switching of 2 outputs for updundant control of a load Switching frequency with resistive load, max. 100 Hz with inductive load, max. 100 Hz with inductive load, max. 100 Hz with inductive load, max. 100 Hz Otal current of the outputs Max. current per module Cable length, shielded, max. 200 m Sockhonous mode (application synchronized up to terminal) Ves Substitute, max. 100 µs	Response threshold, typ.	2.8 to 5.2 A
Switching capacity of the outputs with resistive load, max. 10 W Load resistance range lower limit 12 Ω upper limit 3400 Ω Output ourrent for signal "1" rated value 2 A for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. 50 μs "1" to "0", max. 100 μs Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length , shielded, max. 200 m Sochronous mode (application synchronized up to terminal) Yes Jiter, max. 100 μs Iter, max. 100 μs	Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
with resistive load, max. on lamp load, max. Load resistance range lower limit upper limit 2 Ω upper limit 3400 Ω Output current for signal "1" rated value for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. 50 μs "1" to "0", max. 100 μs Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 100 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length Cable length unshielded, max. 200 m Cochronous mode Isochronous mode (application synchronized up to terminal) Yes Alarms Alarms	Controlling a digital input	Yes
tower limit 12 Ω upper limit 3400 Ω Output current for signal "1" rated value 2 A for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. 50 μs "1" to "0", max. 100 μs Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length shiekled, max. 200 m Cable length unshielded, max. 200 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Substitute values connectable Yes Alarms	Switching capacity of the outputs	
Load resistance range 12 Ω upper limit 3400 Ω Output current For signal *1" rated value 2 A for signal *0" residual current, max. 0.1 mA Output delay with resistive load 50 μs *1" to *0", max. 100 μs Parallel switching of 2 outputs No for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. with inductive loed, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs 8 A Max. current per module 8 A Cable length 200 m sochronous mode sochronous mode (application synchronized up to terminal) Yes Jitter, max. 100 μs nterrupts/diagnostics/status information Yes	with resistive load, max.	2 A
lower limit 42 Ω upper limit 3400 Ω Output current for signal "1" rated value 2 A for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. 50 μs "1" to "0", max. 100 μs Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length, shielded, max. 200 m sochronous mode Isochronous mode (application synchronized up to terminal) Yes Jitter, max. 100 μs Alarms	on lamp load, max.	10 W
upper limit Output current for signal "1" rated value 2 A for signal "0" residual current, max. 0.1 mA Output delay with resistive load "0" to "1", max. 50 μs "1" to "0", max. 100 μs Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length, shielded, max. 1000 m Cable length unshielded, max. 200 m Sochronous mode (application synchronized up to terminal) Yes Jitter, max. 100 μs Herrupts/diagnostics/status information Substitute values connectable Yes Alarms	Load resistance range	
Cutput current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load "0" to "1", max. "1" to "0", max. 100 µs Parallel switching of 2 outputs for uprating for redundant control of a load Switching frequency with resistive load, max. 100 Hz with inductive load, max. 100 Hz with inductive load, max. 101 Hz Total current of the outputs Max. current per module Cable length Cable length unshielded, max. 200 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs Ves Alarms	lower limit	12 Ω
for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load "0" to "1", max. "1" to "0", max. 100 µs Parallel switching of 2 outputs for uprating for redundant control of a load Switching frequency with resistive load, max. with inductive load, max. 100 Hz Wath inductive load, max. 10 Hz Total current of the outputs Max. current per module Cable length Cable length unshielded, max. 200 m Sochronous mode Isochronous mode Is	upper limit	3400 Ω
for signal "0" residual current, max. Output delay with resistive load "0" to "1", max. "1" to "0", max. Parallel switching of 2 outputs for uprating	Output current	
Output delay with resistive load "0" to "1", max. 100 µs Parallel switching of 2 outputs for uprating for redundant control of a load Switching frequency with resistive load, max. with inductive load, max. 100 Hz with inductive load, max. 100 Hz with inductive load, max. 101 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. 200 m Sochronous mode Isochronous mode Isochronous mode Isochronous mode (application synchronized up to terminal) Ves Jitter, max. 100 µs **Terrupts/diagnostics/status information Substitute values connectable Yes Alarms	for signal "1" rated value	2 A
"1" to "1", max. "1" to "0", max. Parallel switching of 2 outputs for uprating for redundant control of a load Yes Switching frequency with resistive load, max. uith inductive load, max. on lamp load, max. 10 Hz Total current of the outputs Max. current per module Cable length Cable length, shielded, max. 200 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs No Yes Alarms	for signal "0" residual current, max.	0.1 mA
Parallel switching of 2 outputs for uprating No for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. 100 Hz with inductive load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. 200 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 μs No Yes Alarms	Output delay with resistive load	
For uprating No for redundant control of a load Yes Switching frequency with resistive load, max. 100 Hz with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. 1000 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Yes Jitter, max. 100 µs nterrupts/diagnostics/status information Substitute values connectable Yes Alarms	"0" to "1", max.	50 μs
for uprating for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. 1000 m Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Ves Interrupts/diagnostics/status information Substitute values connectable Yes Alarms	"1" to "0", max.	100 µs
for redundant control of a load Switching frequency with resistive load, max. with inductive load, max. on lamp load, max. 100 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs hterrupts/diagnostics/status information Substitute values connectable Yes Alarms	Parallel switching of 2 outputs	
with resistive load, max. with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. 1000 m Cable length unshielded, max. 200 m sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs nterrupts/diagnostics/status information Substitute values connectable Yes Alarms	for uprating	No
with resistive load, max. with inductive load, max. 2 Hz on lamp load, max. 10 Hz Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs hterrupts/diagnostics/status information Substitute values connectable Yes Alarms	for redundant control of a load	Yes
with inductive load, max. on lamp load, max. 10 Hz Total current of the outputs Max. current per module Cable length Cable length, shielded, max. Cable length unshielded, max. Cable length unshielded, max. 200 m sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 1000 µs 1000 µs Alarms	Switching frequency	
on lamp load, max. Total current of the outputs Max. current per module 8 A Cable length Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs nterrupts/diagnostics/status information Substitute values connectable Yes Alarms	with resistive load, max.	100 Hz
Total current of the outputs Max. current per module Cable length Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs hterrupts/diagnostics/status information Substitute values connectable Yes Alarms	with inductive load, max.	2 Hz
Max. current per module Cable length Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs Negrotical periodic pe	on lamp load, max.	10 Hz
Cable length, shielded, max. Cable length unshielded, max. Cable length unshielded, max. Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 m Yes Jitter, max. 100 µs **Terrupts/diagnostics/status information Substitute values connectable Yes Alarms	Total current of the outputs	
Cable length, shielded, max. Cable length unshielded, max. 200 m Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs hterrupts/diagnostics/status information Substitute values connectable Yes Alarms	Max. current per module	8 A
Cable length unshielded, max. Sochronous mode Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs Interrupts/diagnostics/status information Substitute values connectable Alarms	Cable length	
Isochronous mode (application synchronized up to terminal) Jitter, max. 100 µs nterrupts/diagnostics/status information Substitute values connectable Alarms	Cable length, shielded, max.	1000 m
Isochronous mode (application synchronized up to terminal) Jitter, max. 100 μs nterrupts/diagnostics/status information Substitute values connectable Alarms	Cable length unshielded, max.	200 m
Jitter, max. 100 µs Interrupts/diagnostics/status information Substitute values connectable Alarms	sochronous mode	
The state of the s	Isochronous mode (application synchronized up to terminal)	Yes
Substitute values connectable Yes Alarms	Jitter, max.	100 µs
Alarms	nterrupts/diagnostics/status information	
	Substitute values connectable	Yes
Diagnostic alarm Yes	Alarms	
-	Diagnostic alarm	Yes

Diagnostic messages	
Diagnostic messages	Mar.
Monitoring the supply voltage	Yes
Wire-break	Yes
Short-circuit	Yes
Diagnostics indication LED	
Monitoring the supply voltage (PWR-LED)	Yes ; green PWR LED
Channel status display	Yes ; Green LED
for module diagnostics	Yes ; green/red DIAG LED
Galvanic isolation	
Galvanic isolation channels	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation tested with	707 V DC
Ambient conditions	
Operating temperature	
horizontal installation, min.	-40 °C
horizontal installation, max.	70 °C ; = Tmax; > +60 °C number of simultaneously controllable outputs max. 2 x 0.25 A or max. 4 x 0.125 A, max. total current 0.5 A
vertical installation, min.	-40 °C
vertical installation, max.	50 °C
Extended ambient conditions	
relative to ambient temperature-atmospheric pressure- installation altitude	Tmin Tmax at 1080 hPa 795 hPa (-1000 m +2000 m) // Tmin (Tmax - 10K) at 795 hPa 658 hPa (+2000 m +3500 m) // Tmin (Tmax - 20K) at 658 hPa 540 hPa (+3500 m +5000 m)
Relative humidity	
with condensation, tested in accordance with IEC 60068-2-38, maximum	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
to biologically active substances/conformity with EN 60721-3 -3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
to chemically active substances/conformity with EN 60721-3 -3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
to mechanically active substances/conformity with EN 60721 -3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
Dimensions	
Width	15 mm

Weights Weight, approx. 30 g

Status Aug 4, 2014