SIEMENS

Data sheet 6ES7647-0CM00-1AA2



IPC SM SENS DI 4 DI: 120/230 V AC 2 DI 240 V DC

General information	
Product type designation	IOT2050
Supply voltage	
Type of supply voltage	24 V DC
Input current	
Current consumption (rated value)	80 mA; 5 V (SM Bus)
Digital inputs	
Number of digital inputs	6; 4 AC DI / 2 Special DI
Input voltage	
● Type of input voltage	4 DI of 120/230 V AC & 2 DI of 240 V DC
● for signal "0"	DI0~1: -12 V to +12 V / DI2~5: 20 V AC
● for signal "1"	DI0~1: -240 V to -20 V or +20 V to +240 V / DI2~5: 79 V AC
Input current	
● for signal "1", typ.	DI0~1: 5mA / DI2~5: 120 V AC at 6 mA, 230 V AC at 9 mA
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
EMC	
Interference immunity against voltage surge	
● asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
● symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4, EN 61000-6-2
Ambient conditions	
Ambient temperature during operation	
● min.	-20 °C
● max.	60 °C
Ambient temperature during storage/transportation	
● min.	-40 °C
● max.	70 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	2 000 m
Relative humidity	

Subject to change without notice
© Copyright Siemens

● Relative humidity	5 to 95 % at 30 °C
Vibrations	
● Vibration resistance during operation acc. to IEC 60068-2-6	EN 60068-2-6 Sinusoidal vibration DIN rail mount: 3.5 mm from 8.4 Hz, 1g from 8.4 - 150 Hz wall mount: 7.0 mm from 5-8.4 Hz, 2g from 8.4 to 150 Hz 10 sweeps each axis, 1 octave per minute
Shock testing	
● Shock load during operation	EN 60068-2-27 Mechanical shock 15g, 11 ms pulse, 6 shocks in each of 3 axis
Mechanics/material	
Enclosure material (front)	plastic
● Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm

Classifications

	Version	Classification
eClass	14	19-20-01-02
eClass	12	19-20-01-02
eClass	9.1	19-20-01-02
eClass	9	19-20-01-02
eClass	8	19-20-01-02
eClass	7.1	19-20-01-02
eClass	6	19-20-01-02
ETIM	10	EC001413
ETIM	9	EC001413
ETIM	8	EC001413
ETIM	7	EC001413

Approvals / Certificates

General Product Approval

Manufacturer Declaration

RCM EG-Konf. UK CA UL CB

last modified: 11/29/2025

Subject to change without notice
© Copyright Siemens