SIEMENS

Data sheet

6AV7260-1DA40-0BX3

SIMATIC IPC677D (Panel PC), 2x10/100/1000 Mbit/s Ethernet; 4x USB V3.0, 1x serial (COM1); Watchdog, temperature and Fan monitoring; RAID controller onboard; 19" Touch (1366x 768); with front USB Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X) 500 GB HDD SATA; 16 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) without expansion (software) AC 110/230V industrial power supply unit with NAMUR; Power supply cable USA

| General information | |
|--|--|
| Product type designation | IPC677D |
| Display | |
| Design of display | 19" TFT touch |
| Screen diagonal | 19 in |
| Resolution (pixels) | |
| Horizontal image resolution | 1 366 pixel |
| Vertical image resolution | 768 pixel |
| Backlighting | |
| MTBF backlighting (at 25 °C) | 50 000 h |
| Control elements | |
| Input device | |
| Mouse, at front | Front USB 2.0 (500mA) |
| Touch operation | |
| Design as touch screen | Yes; analog, resistive |
| Installation type/mounting | |
| Mounting | For horizontal and vertical mounting |
| Design | Panel PC, built-in unit |
| central design | Yes |
| Mounting in portrait format possible | Yes |
| maximum permissible installation angle +/- | 20° |
| Supply voltage | |
| Type of supply voltage | 100/240 V AC (autorange); 24 V DC |
| Line frequency | |
| Rated value 50 Hz | Yes |
| Rated value 60 Hz | Yes |
| Mains buffering | |
| Mains/voltage failure stored energy time | 10 ms |
| Power loss | |
| In full configuration | 155 W |
| Processor | |
| Processor type | Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB Cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB Cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB Cache, AMT) |
| Chipset | Intel DH82C226 PCH |
| Graphic | |
| Graphics controller | Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron) |
| Drives | |
| Optical drives | DVD±R±RW combi-drive, optional |
| Hard disk | 3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 1 TB; RAID1 $2x 2.5$ " SATA ≥ 320 GB; solid-state drive (SSD) ≥ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 $2x 2.5$ " SATA ≥ 320 GB byte in removable drive bay |
| SSD | Yes; ≥ 240 GB optional |
| Memory | |
| Type of memory | DDR3-1600 DIMM |
| Main memory | 2 / 4 / 8 / 16 GB; ECC optional |
| Capacity of main memory, max. | 16 Gbyte |

| Data areas and their retentivity | |
|---|--|
| Retentive data area (incl. timers, counters, flags), max. | 2 Mbyte; 128 KB can be stored in the buffer time; optional |
| Hardware configuration | |
| Slots | |
| • free slots | 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer |
| Number of PCI slots | 2 |
| Number of PCI slots | 2 |
| nterfaces | |
| PROFIBUS/MPI | Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622 |
| Number of industrial Ethernet interfaces | 2; 2x RJ45 (independent) |
| Number of PROFINET interfaces | 3; Optional |
| USB port | 4x USB 3.0 |
| Connection for keyboard/mouse | USB / USB |
| serial interface | 1x COM1 (RS 232), optional: 1x COM2 (RS 232) |
| parallel interface | optional LPT1 |
| Video interfaces | - Access |
| Graphics interface | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional) |
| Industrial Ethernet | in Display, or and in Diff, in voice a dauptor sause (optional) |
| Industrial Ethernet interface | onboard, 2x 10 / 100 / 1 000 Mbit, RJ45 |
| — 100 Mbps | Yes |
| — 100 Mbps | Yes |
| nterrupts/diagnostics/status information | 160 |
| Bus diagnostics | Yes |
| | Tes |
| ntegrated Functions | |
| Monitoring functions | · · |
| Temperature monitoring | Yes |
| Watchdog | Yes |
| Status LEDs | Yes |
| • Fan | Yes |
| Monitoring function via network | Optional |
| EMC | |
| Interference immunity against discharge of static electricity | |
| Interference immunity against discharge of static electricity | ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 |
| • | |
| Interference immunity against high-frequency electromagnetic fiel | |
| • | |
| Interference immunity against high-frequency electromagnetic field | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, |
| Interference immunity against high-frequency electromagnetic fiel • Interference immunity against high frequency radiation | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, |
| Interference immunity against high-frequency electromagnetic fiel • Interference immunity against high frequency radiation Interference immunity to cable-borne interference | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge |
| Interference immunity against high-frequency electromagnetic fiel • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; |
| Interference immunity against high-frequency electromagnetic fiel • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark UL approval | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 Yes Yes |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark UL approval UL 508 | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 Yes Yes Yes |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark UL approval UL 508 cULus | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 Yes Yes Yes Yes |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables > 30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark UL approval UL 508 cULus RCM (formerly C-TICK) | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 Yes Yes Yes Yes Yes |
| Interference immunity against high-frequency electromagnetic fiel Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on signal cables >30m Interference immunity on signal cables < 30m Interference immunity against voltage surge asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Degree and class of protection IP (at the front) IP (rear) Standards, approvals, certificates CE mark UL approval UL 508 cULus | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8 EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A IP65 IP20 Yes Yes Yes Yes |

| EMC | CE, EN 61000-6-4:2007, EN 61000-6-2:2005 | |
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| Ambient conditions | | |
| Ambient temperature during operation | | |
| • min. | 5 °C | |
| • max. | 45 °C | |
| Ambient temperature during storage/transportation | | |
| • min. | -20 °C | |
| • max. | 60 °C | |
| Relative humidity | | |
| Relative humidity | Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 $^{\circ}\text{C}$ (no condensation) | |
| Vibrations | | |
| Vibration resistance during operation acc. to IEC 60068- 2-6 | tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s 2 (1 g) | |
| Shock testing | | |
| Shock load during operation | Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks | |
| Operating systems | | |
| pre-installed operating system | Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI | |
| without operating system | Yes | |
| pre-installed operating system | | |
| Windows 7 | Yes; Ultimate 32 bit or 64 bit | |
| Windows 10 Enterprise | Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI | |
| Software | | |
| SIMATIC Software | Optional package with SIMATIC WinCC or WinAC RTX | |
| Dimensions | | |
| Width of the housing front | 483 mm | |
| Height of housing front | 337 mm | |
| Mounting cutout, width | 465 mm | |
| Mounting cutout, height | 319 mm | |
| Overall depth | 112 mm | |
| additional mounting depth (optical drive) | 26 mm | |
| Weights | | |
| Weight, approx. | 14 kg | |

last modified: 1/31/2021 🖸