

# COMTRAXX® CP9xx – Control Panel

Alarm indicator and operator panel for medical locations and other areas



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Control Panel

## Device features

- User-friendly touch-sensitive monitoring system for medical locations and other applications
- Particularly simple operation
- Additional information for medical and technical personnel
- Visual and acoustic notification in the event of an alarm
- Clear menu structure with self-explanatory interactive images
- Clearly marked safety functions
- Silent due to operation without fan
- High-quality representation with excellent contrast, high resolution and a wide viewing angle
- Possibility of graphical integration of building plans or status display in photo quality
- Easy integration of external subsections like charging stations for operating theatre table controls and intercom systems with front foil
- Sealed glass or antibacterial foil surface
- Screwless mounted front plate
- Simple conversion and expansion with minimal service interruptions

## Approvals and certifications



## Product description

At the interface between humans and machines, alarm indicator and operator panels play a key role. Their task consists in emitting a visual and acoustic alarm and converting information from the system into comprehensible operating and handling instructions. This applies in particular to critical operating situations. The CP9xx Control Panel offers the user a solution that meets the requirements of modern medical locations as well as industrial and purpose-built buildings.

### Possible applications:

Monitoring, operation and display of:

- IT systems
- Supply systems for medical gases
- Ventilation and air-conditioning systems
- Room lighting
- Operating theatre lights
- Special power supply systems (BSV (battery-based safety power supply) or UPS (uninterruptible power supply))
- Further systems from different manufacturers.

### Optional accessories:

The detached I/O system offers numerous options for the integration of digital and analogue I/Os with different operating voltages, power, measurement signals or special functions into the alarm indicator and operator panel.

Communication with building management systems via common interfaces, such as:



The result is an all-around system which is both modular and flexible and can thus be adjusted, expanded or connected to new technologies.

### Configuration, diagnosis, service:

Each panel can be individually manufactured and tailored to the requirements of the user. By integrating technical equipment into a single panel, a technical monitoring centre is created. It offers diagnostic options thanks to a complete system overview from a central point via a web browser, supported by data loggers and a history memory.

Parameter setting (setting limit values, entering individual customer texts, modifying the system configuration etc.) is optionally available.

**Ordering details**
**Complete devices**

| Type  | Display size    | Supply  | Device dimensions (W x H x D) | Weight | Display unit           | Art. No.  |
|-------|-----------------|---|-------------------------------|--------|------------------------|-----------|
| CP907 | 7" (17.6 cm)    | DC 24 V, < 15 W; PoE possible as an alternative | 226 x 144 x 78 mm             | 1.1 kg | Glass, tempered, white | B95061080 |
| CP915 | 15.6" (39.6 cm) | AC 100...240 V, < 30 W                          | 505 x 350 x 92 mm             | 6.1 kg | Glass, tempered, white | B95061081 |
|       |                 |   |                               |        | Glass, tempered, gray  | B95061085 |
| CP924 | 24" (61.0 cm)   | –   | –                             | –      | Glass, tempered, white | Soon      |
|       |                 |   |                               |        | Glass, tempered, gray  | Soon      |

Scope of delivery: display unit, flush-mounting enclosure incl. mounting plate with electronics, CP9xx connecting cable and plug connector kit.

**Components separately**

| Device series | Type   | Art. No.  |
|---------------|--|-----------|
| CP907         | Flush-mounting enclosure                                       | B95100140 |
| CP915         | Display unit white   | B95061090 |
|               | Display unit gray  | B95061110 |
|               | Flush-mounting enclosure incl. mounting plate with electronics | B95061092 |
| CP924         | Display unit white   | Soon      |
|               | Display unit gray  | Soon      |
|               | Flush-mounting enclosure incl. mounting plate with electronics | Soon      |

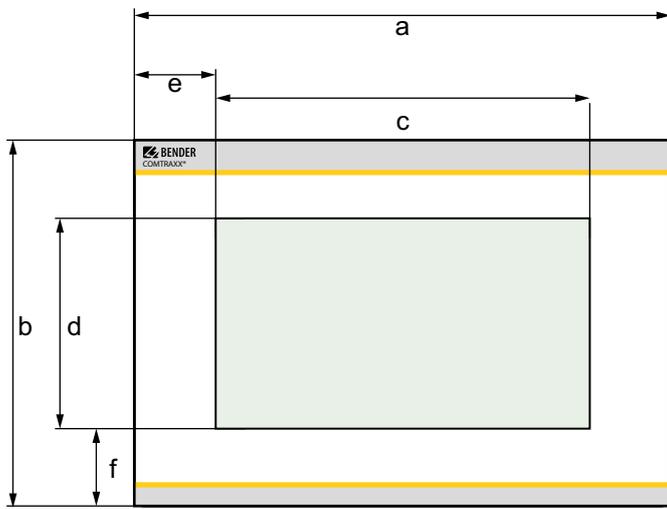
**Accessories**

| Description                          | Art. No.  |
|--------------------------------------|-----------|
| CP9xx suction lifter                 | B95061911 |
| CP9xx replacement plug connector kit | B95061910 |

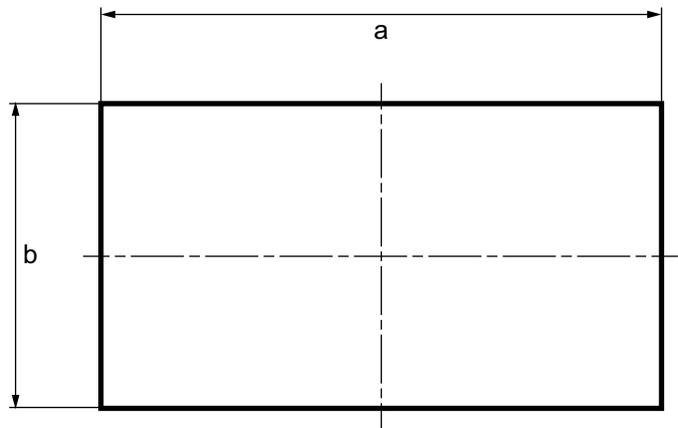
**Other project-specific versions with foil surface or with additional internal components available on request:**

- Charging tray for operating theatre table remote controls
- Intercom systems
- Operating theatre light controls
- Programmable backlit keypads
- Digital/Analogue inputs/outputs for installation in panel enclosures or control cabinets
- Data coupling to third-party systems
- Project-specific built-in enclosures
- Integration of third-party systems
- etc.

**External dimensions**



**Installation dimensions – panel cut-out**



| Type  | Dimensions (mm) ±0.20 |     |        |        |       |       |
|-------|-----------------------|-----|--------|--------|-------|-------|
|       | a                     | b   | c      | d      | e     | f     |
| CP907 | 226                   | 144 | 153.8  | 92.8   | 36.1  | 25.6  |
| CP915 | 505                   | 350 | 350.73 | 200.04 | 77.14 | 74.98 |
| CP924 |                       |     |        |        |       |       |

| Type  | Dimensions (mm) |     | Required installation depth |
|-------|-----------------|-----|-----------------------------|
|       | a               | b   |                             |
| CP907 | 212             | 124 | 75                          |
| CP915 | 471             | 314 | 87                          |
| CP924 |                 |     |                             |

**Technical data**
**Insulation coordination CP907 acc. to IEC 60664-1**

|                       |       |
|-----------------------|-------|
| Rated voltage         | 50 V  |
| Overvoltage category  | III   |
| Pollution degree      | 2     |
| Rated impulse voltage | 800 V |

**Insulation coordination CP915 acc. to IEC 60664-1**

|                          |          |
|--------------------------|----------|
| Rated insulation voltage | AC 250 V |
| Overvoltage category     | III      |
| Pollution degree         | 2        |
| Rated impulse voltage    | 4 kV     |

**Supply CP907 via plug-in terminal (A1/+;A2/-)**

|  |                              |
|--|------------------------------|
| Nominal voltage CP907  | DC 24 V                      |
| Nominal voltage tolerance  | ±20 %                        |
| Typical power consumption at DC 24 V   | < 15 W                       |
| Connection   | plug-in terminal (A1/+;A2/-) |
| Maximum cable length when supplied via B95061210 (DC 24 V power supply unit 1.75 A): |                              |
| 0.28 mm <sup>2</sup>   | 75 m                         |
| 0.5 mm <sup>2</sup>  | 130 m                        |
| 0.75 mm <sup>2</sup>   | 200 m                        |
| 1.5 mm <sup>2</sup>  | 400 m                        |
| 2.5 mm <sup>2</sup>  | 650 m                        |

**Supply via PoE**

|   |             |
|---|-------------|
| Nominal voltage   | DC 48 V     |
| Nominal voltage tolerance   | -25...+15 % |
| Typical power consumption for PoE                                     | < 15 W      |
| Maximum cable length when supplied via AWG 26/7; 0.14 mm <sup>2</sup> | 100 m       |

**Supply CP915 via terminal block (L1; N)**

|  |                        |
|--|------------------------|
| Nominal voltage CP915 via external power supply unit | AC 100... 240 V        |
| Nominal voltage tolerance                            | -15...+10 %            |
| Frequency range Us                                   | 50...60 Hz             |
| Typical power consumption at AC 230 V                | < 30 W                 |
| Connection   | terminal block (L1; N) |

**Stored energy time in the event of voltage failure**

|                                    |                 |
|------------------------------------|-----------------|
| Time, date                         | min. 3 days     |
| Restart after voltage interruption | min. 15 seconds |

**Display/operation**

|                                 | CP907                          | CP915         | CP924         |
|---------------------------------|--------------------------------|---------------|---------------|
| Display (TFT touch display)     | 7"                             | 15.6"         | 24"           |
| Resolution (pixels)             | 800 x 480                      | 1366 x 768    | 1920 x 1080   |
| Active viewable screen (mm)     | 152.4 x 91.4                   | 344.2 x 193.3 | 531.3 x 298.8 |
| Brightness (cd/m <sup>2</sup> ) | 300                            | 300           | 300           |
| Contrast (typical)              | 300:1                          | 400:1         | 5000:1        |
| Viewing angle (H/V)             | 70°/70°                        | 80°/70°       | 89°/89°       |
| Number of colours               | 262 K                          | 16.7 M        | 16.7 M        |
| Background lighting             | LED                            |               |               |
| Operation                       | Capacitive multi-touch display |               |               |

**Memory**

|  |                                     |
|--|-------------------------------------|
| E-mail configuration and device failure monitoring                           | max. 250 entries                    |
| Individual texts   | 1200 texts with 100 characters each |
| Displayable devices  | 247                                 |
| Number of data points for "third-party devices" to Modbus TCP and Modbus RTU | 50                                  |
| Number of data loggers   | 30                                  |
| Number of data points per data logger  | 10,000                              |
| Number of entries in the history memory                                      | 1,000                               |

**Visualisation**

|                       |  |
|-----------------------|--|
| Number of pages       | 20                                       |
| Background image size | max. 3 MB/image; max. 50 MB total memory |

**Interfaces**
**Ethernet**

|   |  |
|---|--|
| Connection  | RJ45   |
| Data rate   | 10/100 Mbit/s, autodetect  |
| DHCP  | on/off (off)*  |
| Toff (DHCP)                                       | 5...60 s (30 s)*   |
| IP address  | nnn.nnn.nnn.nnn (192.168.0.254)*, can always be reached via: 169.254.0.1 |
| Net mask  | nnn.nnn.nnn.nnn (255.255.0.0)*   |
| Protocols (depending on function module selected) | TCP/IP, Modbus RTU, DHCP, SMTP, NTP                                      |

**BCOM**

|                        |               |
|------------------------|---------------|
| Interface/protocol     | Ethernet/BCOM |
| BCOM system name       | (SYSTEM)*     |
| BCOM subsystem address | 1...255 (1)*  |
| BCOM device address    | 1...255 (1)*  |

**Modbus TCP**

|   |  |
|---|--|
| Interface/protocol                        | Ethernet/Modbus TCP  |
| Operating mode                            | Client for PEM and "third-party devices" assigned                  |
| Operating mode                            | Server for access to process image and for Modbus control commands |
| Parallel data access by different clients | max. 8   |

**SNMP**

|                   |  |
|-------------------|--|
| Versions          | 1, 2c, 3   |
| Devices supported | Queries to all devices (channels) possible (no trap functionality) |

**BMS bus**

|  |  |
|--|--|
| Interface/protocol   | RS-485/BMS internal  |
| Operating mode   | master/slave (master)*   |
| Baud rate  | 9.6 kbit/s   |
| Cable length   | < 1200 m   |
| Cable: twisted pair, shielded, one end of shield connected to PE | recommended: J-Y(St)Y min. 2x0.8                                     |
| Connection   | "ABMS", "BBMS" (see plug-in terminal)                                |
| Terminating resistor   | 120 Ω (0.25 W), can be switched on internally (see plug-in terminal) |
| Device address   | 1...99 (1)*  |

**Modbus RTU**

|  |  |
|--|--|
| Interface/protocol   | RS-485/Modbus RTU  |
| Operating mode   | master   |
| Baud rate  | 9.6...57.6 kbit/s  |
| Cable length   | < 1200 m   |
| Cable: twisted pair, shielded, one end of shield connected to PE | recommended: J-Y(St)Y min. 2x0.8                                     |
| Connection   | "AMB", "BMB" (see plug-in terminal)                                  |
| Terminating resistor   | 120 Ω (0.25 W), can be switched on internally (see plug-in terminal) |
| Supported Modbus RTU slave addresses                             | 2...247  |

**Digital inputs (1-12)**

|                      |  |
|----------------------|--|
| Number               | 12   |
| Galvanic separation  | yes  |
| Operating mode       | selectable for each input: active-high or active-low |
| Factory setting      | active-high  |
| Voltage range (high) | AC/DC 10...30 V                                      |
| Voltage range (low)  | AC/DC 0...2 V  |
| Connection           | plug-in terminal: (1;1;2;...12;12)                   |
| Maximum cable length | < 1000 m   |

## Technical data

### Switching elements

|   |                               |
|---|-------------------------------|
| Number  | 1 changeover contact          |
| Operating mode  | N/C operation / N/O operation |
| Function  | programmable                  |
| Electrical endurance under rated operating conditions, number of cycles | 10,000                        |

### Contact data acc. to IEC 60947-5-1:

| Utilisation category      | AC-13                        | AC-14 | DC-12 |
|---------------------------|------------------------------|-------|-------|
| Rated operational voltage | 24 V                         | 24 V  | 24 V  |
| Rated operational current | 2 A                          | 2 A   | 2 A   |
| Minimum contact rating    | 1 mA at AC/DC > 10 V         |       |       |
| Connection                | plug-in terminal: (11;12;14) |       |       |

### Buzzer

|                   |   |
|-------------------|---|
| Buzzer message    | can be acknowledged, adoption of characteristics of new value |
| Buzzer interval   | configurable  |
| Buzzer frequency  | configurable  |
| Buzzer repetition | configurable  |

### Audio (for CP015 and CP924 only)

|          |   |
|----------|---|
| Line IN  | STEREO signal input via 3.5 mm jack plug                |
| Line OUT | Output to a STEREO playback device via 3.5 mm jack plug |

### Device connections

#### Terminal block (L1; N; PE) (for CP015 and CP924 only)

|  |                         |
|--|-------------------------|
| Conductor sizes  | AWG 20-12               |
| Stripping length   | 10...11 mm              |
| rigid/flexible   | 0.5...4 mm <sup>2</sup> |
| flexible with ferrule with/without plastic sleeve                  | 0.5...4 mm <sup>2</sup> |
| Multiple conductor, flexible with TWIN ferrule with plastic sleeve | 0.5...4 mm <sup>2</sup> |

#### Plug-in terminal (A1/+;A2/) (11;12;14)

|  |                            |
|--|----------------------------|
| Conductor sizes  | AWG 24-12                  |
| Stripping length   | 10 mm                      |
| rigid/flexible   | 0.2...2.5 mm <sup>2</sup>  |
| flexible with ferrule with/without plastic sleeve                  | 0.25...2.5 mm <sup>2</sup> |
| Multiple conductor, flexible with TWIN ferrule with plastic sleeve | 0.5...1.5 mm <sup>2</sup>  |

#### Plug-in terminal (I1;k1;l2;k2...I12;k12) (AMB;BMB;SMB;ABMS;BBMS;SBMS)

|  |                             |
|--|-----------------------------|
| Conductor sizes                              | AWG 24-16                   |
| Stripping length                             | 10 mm                       |
| rigid/flexible                               | 0.2...1.5 mm <sup>2</sup>   |
| flexible with ferrule without plastic sleeve | 0.25...1.5 mm <sup>2</sup>  |
| flexible with ferrule with plastic sleeve    | 0.25...0.75 mm <sup>2</sup> |

### Environment/EMC

|                       |              |
|-----------------------|--------------|
| EMC                   | IEC 61326-1  |
| Operating temperature | -10...+55 °C |

#### Classification of climatic conditions acc. to IEC 60721:

|                                   |  |
|-----------------------------------|--|
| Stationary use (IEC 60721-3-3)    | 3K5 (except condensation and formation of ice) |
| Transport (IEC 60721-3-2)         | 2K3  |
| Long-term storage (IEC 60721-3-1) | 1K4  |

#### Classification of mechanical conditions acc. to IEC 60721:

|                                   |               |
|-----------------------------------|---------------|
| Stationary use (IEC 60721-3-3)    | 3M4           |
| Transport (IEC 60721-3-2)         | 2M2           |
| Long-term storage (IEC 60721-3-1) | 1M3           |
| Range of use                      | < 2000 m AMSL |

### Other

|                                 |                      |
|---------------------------------|----------------------|
| Operating mode                  | continuous operation |
| Mounting                        | display-oriented     |
| Degree of protection, front     | IP50                 |
| Degree of protection, enclosure | IP20                 |
| Flammability class              | UL 94V-0             |
| Dimensions CP907 (W x H x D)    | 226 x 144 x 78 mm    |
| Dimensions CP915 (W x H x D)    | 505 x 350 x 92 mm    |
| Documentation number            | D00349               |
| Weight CP907                    | approx. 1.1 kg       |
| Weight CP915                    | approx. 6.1 kg       |



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