

Technical data sheet

Connection unit

Part no.: 50030835

MA 31 100

Contents

- Technical data
- Electrical connection
- Operation and display



Figure can vary



Technical data

Basic data

| | |
|--------|-------|
| Series | MA 31 |
|--------|-------|

Electrical data

| | |
|--------------------|------------------------|
| Protective circuit | Overvoltage protection |
|--------------------|------------------------|

Performance data

| | |
|-------------------------------|-----------------|
| Supply voltage U _B | 18 ... 36 V, DC |
|-------------------------------|-----------------|

Interface

| | |
|------|--------|
| Type | RS 485 |
|------|--------|

Connection

| | |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

Connection 1

| | |
|----------|--|
| Function | Connection to device Data interface Voltage supply |
|----------|--|

| | |
|--------------------|----------|
| Type of connection | Terminal |
|--------------------|----------|

| | |
|-------------|---------|
| No. of pins | 25 -pin |
|-------------|---------|

Connection 2

| | |
|----------|-------------------|
| Function | Service interface |
|----------|-------------------|

| | |
|--------------------|-------|
| Type of connection | Sub-D |
|--------------------|-------|

| | |
|-------------|--------|
| No. of pins | 9 -pin |
|-------------|--------|

Mechanical data

| | |
|--------|-------|
| Design | Cubic |
|--------|-------|

| | |
|-----------------------|-------------------------|
| Dimension (W x H x L) | 120 mm x 55 mm x 180 mm |
|-----------------------|-------------------------|

| | |
|------------------|-------|
| Housing material | Metal |
|------------------|-------|

| | |
|------------|-------|
| Net weight | 640 g |
|------------|-------|

| | |
|---------------|---------------|
| Housing color | Red, RAL 3000 |
|---------------|---------------|

| | |
|-------------------|-----------------------|
| Type of fastening | Through-hole mounting |
|-------------------|-----------------------|

Operation and display

| | |
|-----------------|-----|
| Type of display | LED |
|-----------------|-----|

| | |
|----------------|------------|
| Number of LEDs | 6 Piece(s) |
|----------------|------------|

Environmental data

| | |
|--------------------------------|-------------|
| Ambient temperature, operation | 0 ... 50 °C |
|--------------------------------|-------------|

| | |
|------------------------------|---------------|
| Ambient temperature, storage | -20 ... 60 °C |
|------------------------------|---------------|

| | |
|------------------------------------|------------|
| Relative humidity (non-condensing) | 5 ... 90 % |
|------------------------------------|------------|

Certifications

| | |
|----------------------|-------|
| Degree of protection | IP 65 |
|----------------------|-------|

Classification

| | |
|-----------------------|----------|
| Customs tariff number | 84733080 |
|-----------------------|----------|

| | |
|--------------|----------|
| ECLASS 5.1.4 | 27069190 |
|--------------|----------|

| | |
|------------|----------|
| ECLASS 8.0 | 27069190 |
|------------|----------|

| | |
|------------|----------|
| ECLASS 9.0 | 27069190 |
|------------|----------|

| | |
|-------------|----------|
| ECLASS 10.0 | 27069190 |
|-------------|----------|

| | |
|-------------|----------|
| ECLASS 11.0 | 27069090 |
|-------------|----------|

| | |
|-------------|----------|
| ECLASS 12.0 | 27069090 |
|-------------|----------|

| | |
|----------|----------|
| ETIM 5.0 | EC001855 |
|----------|----------|

| | |
|----------|----------|
| ETIM 6.0 | EC001855 |
|----------|----------|

| | |
|----------|----------|
| ETIM 7.0 | EC001855 |
|----------|----------|

Electrical connection

Connection 1

| | |
|----------|--|
| Function | Connection to device Data interface Voltage supply |
|----------|--|

| | |
|--------------------|----------|
| Type of connection | Terminal |
|--------------------|----------|

| | |
|-------------|-----|
| Cable gland | PG9 |
|-------------|-----|

| | |
|-------------|---------|
| No. of pins | 25 -pin |
|-------------|---------|

Terminal

Assignment

| | |
|---|----------|
| 1 | RS 485 A |
|---|----------|

| | |
|---|----------|
| 2 | RS 485 A |
|---|----------|

| | |
|---|----------|
| 3 | RS 485 B |
|---|----------|

| | |
|---|----------|
| 4 | RS 485 B |
|---|----------|

| | |
|---|------------|
| 5 | RS 485 GND |
|---|------------|

| | |
|---|------------|
| 6 | RS 485 GND |
|---|------------|

| | |
|---|------|
| 7 | n.c. |
|---|------|

| | |
|---|------|
| 8 | n.c. |
|---|------|

| | |
|---|------|
| 9 | n.c. |
|---|------|

| | |
|----|------|
| 10 | n.c. |
|----|------|

| | |
|----|------|
| 11 | n.c. |
|----|------|

Electrical connection

| Terminal | Assignment |
|----------|------------|
| 12 | n.c. |
| 13 | n.c. |
| 14 | n.c. |
| 15 | n.c. |
| 16 | n.c. |
| 17 | V_IN |
| 18 | V_IN |
| 19 | GNDIN |
| 20 | GNDIN |
| 21 | PE |
| 22 | n.c. |
| 23 | RS 485 A |
| 24 | RS 485 B |
| 25 | RS 485 GND |
| 26 | |
| 27 | |

Connection 2

| | |
|--------------------|-------------------|
| Function | Service interface |
| Type of connection | Sub-D |
| Type | Male |
| No. of pins | 9 -pin |

| Pin | Pin assignment |
|-----|----------------|
| 1 | n.c. |
| 2 | RxD Service |
| 3 | TXD service |
| 4 | n.c. |
| 5 | RS 232 GND |
| 6 | n.c. |
| 7 | n.c. |
| 8 | n.c. |
| 9 | n.c. |

Operation and display

| LED | Display | Meaning |
|-----|--------------------------|----------------------------------|
| 1 | Green, continuous light | BUS OK |
| | Green, flashing | Bus error |
| 2 | Green, flashing | Data transmission active |
| | Off | None. |
| 3 | Green, continuous light | Device OK |
| | Off | No supply voltage |
| 4 | Yellow, continuous light | Device error |
| | Yellow, flashing | None. |
| 5 | Red, continuous light | Trigger |
| | Off | None. |
| 6 | Green, flashing | Switching output/switching state |
| | Off | None. |