

CCONTROLLER FOR ELECTRIC FIRE PUMPS IN ACCORDANCE WITH EN12845, POWER SUPPLY 24VAC, BUILT-IN RS485



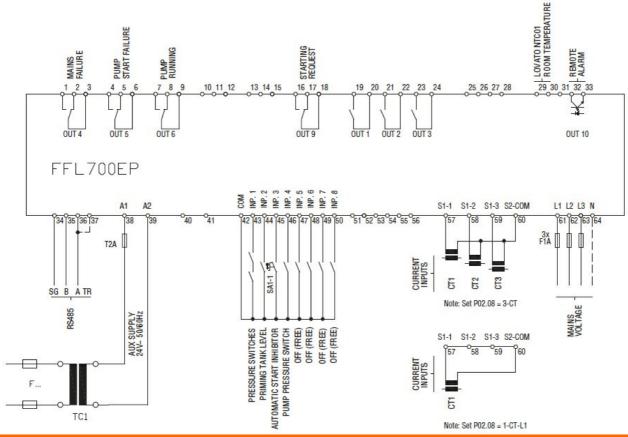
| Product type designation FFLEP Auxiliary supply 24VAC Operating auxil. supply voltage range 19.228.8VAC Operating frequency range Hz 4566Hz Voltage inputs min VAC 100 Rated voltage US min VAC 600 Measurement range V 100720 Frequency range Hz 4566 NTC probe input NTC (LOVATO code NTCO1) Sensor type NTC (LOVATO code NTCO1) Measuring range *C -40+85 Maximum connection lenght mt 3m Digital input signange Nr. 8 Noigital input tourent Nr. 8 Noigital input current MA 56 High digital input signal V 24.9V (typical 3.8V) Digital input signal delay T 24.9V (typical 2.3V) Low digital input signal delay T 2.3V Digital input signal delay T 3.8V Current inputs T 1.0 or 5 | Product designation | | | Electric fire pump controller, supply 24VAC, built-in RS485, not expandable |
|--|---------------------------------------|-----|-----|---|
| Rated auxil. supply voltage 24VAC Operating requency range #2 4566Hz Voltage inputs Rated voltage US min Max VAC 100 Measurement range V 100720 100 | Product type designation | | | FFLEP |
| Operating auxil. supply voltage range 19.228.8VAC Operating frequency range Hz 4566Hz Voltage inputs Image: Control of the part of the p | | | | |
| Operating frequency range Hz 4566Hz Voltage inputs Rated voltage US Rated voltage US min Max VAC 600 Measurement range V 100720 Frequency range Hz 4566 NTC probe input NTC (LOVATO code NTC01) Sensor type "C -40+85 Maximum connection lenght mt 3m Digital inputs Nr. 8 Maximum connection lenght Nr. 8 Digital inputs Nr. 8 Digital input type Negative Digital input signal "A ≤6 High digital input signal "A ≤4.9V (typical 3.8V) Low digital input signal "A ≤4.25V (typical 2.3V) Low digital input signal delay "B ≤2.25V (typical 2.3V) Low digital input signal delay "B ≤50 Current inputs "B S <50 Rated current (le) A /1A or /5A Relay outputs "T <td></td> <td></td> <td></td> <td></td> | | | | |
| Voltage inputs Rated voltage Us min Max VAC | Operating auxil. supply voltage range | | | |
| Rated voltage US min Max VAC v | · • · · · · | | Hz | 4566Hz |
| Measurement range vAC 100 Frequency range Hz 4566 NTC probe input NTC (LOVATO code NTCO1) Sensor type °C -40+85 Maximum connection lenght mt 3m Digital inputs Nr. 8 Digital input type Nr. 8 Digital input signal xm ≤4.9 V (typical 3.8 V) Low digital input signal xm ≤50 Low digital input signal xm ≤50 Current inputs xm ≥50 Current inputs xm >50 Relay outputs xm >7 Number of | • • | | | |
| Measurement range V 100720 Frequency range V 100720 Frequency range ****C.66 NTC probe input ****C.200 | Rated voltage Us | | | |
| Measurement range V 100720 Frequency range Hz 4566 NTC probe input NTC (LOVATO code NTC01) Sensor type "C -40+85 Maximum connection lenght "C -40+85 Maximum connection lenght "T 3m Digital inputs V 8 Digital input type Negative Negative Digital input signal V 24.9V (typical 3.8V) 24.9V (typical 3.8V) Low digital input signal V 51.25V (typical 2.3V) 25V (ty | | min | VAC | 100 |
| Frequency range Hz 4566 NTC probe input Sensor type NTC (LOVATO code NTC01) Measuring range °C -40+85 Maximum connection lenght mt 3m Digital input surent Nr 8 Digital input type Negative Digital input current mA ≤6 High digital input signal √ ≥4.9∨ (typical 3.8∨) Low digital input signal √ ≥4.9∨ (typical 3.8∨) Low digital input signal √ ≥4.9∨ (typical 2.3∨) Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Nr. 7 Relay outputs Nr. 7 Mechanical endurance 10° Electrical endurance 10° Static Outputs NO Number of static output NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface | | Max | VAC | |
| NTC probe input NTC (LOVATO code NTC01) Sensor type NTC (LOVATO code NTC01) Measuring range °C -40+85 Maximum connection lenght mt 3m Digital inputs Number of digital input Spe Negative Digital input type Negative Digital input signal √ ≥4,9V (typical 3.8V) Low digital input signal √ ≤1,25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Nr. 7 Mechanical endurance 10° 10° Electrical endurance 10° 10° Static Outputs NO NO Operating voltage V 130VDC Maximum current mA 50mA R5485 serial interface Interface type Isolated R5485 serial interface Baud rate bps 1200115200 | Measurement range | | V | 100720 |
| Sensor type NTC (LOVATO code NTC01) Measuring range °C 40+85 Maximum connection lenght mt 3m Digital inputs v Number of digital input type Negative Digital input signal mA ≤6 High digital input signal √ 24.9V (typical 3.8V) Low digital input signal √ 225V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs v Relay outputs v Number of relay output Nr. 7 Mechanical endurance 10° Electrical endurance 10° Electrical endurance 10° Static Outputs Nr. 7 Number of static output type NO Operating voltage V 1030VDC Maximum current mA 50mA R5485 serial interface serial interface Baud rate bps 1200115200 | | | Hz | 4566 |
| Sensor type code NTC01) Measuring range °C -40+85 Maximum connection lenght mt 3m Digital inputs Number of digital input Number of digital input type Negative Digital input current mA ≤6 High digital input signal v ≥4.9V (typical 3.8V) Low digital input signal v ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Number of relay output Nr. 7 Mechanical endurance 10° Static Outputs Nr. 7 Number of static output N. Towspan="2">N. | NTC probe input | | | |
| Maximum connection lenght mt 3m Digital inputs Nr. 8 Digital input type Negative Digital input current mA ≤6 High digital input signal √ ≥4.9V (typical 3.8V) Low digital input signal √ ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs | Sensor type | | | |
| Digital inputs Nr. 8 Digital input type Negative Digital input current mA ≤6 High digital input signal V ≥4.9V (typical 3.8V) Low digital input signal V ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs Current (le) A /1A or /5A Relay outputs Nr. 7 Mechanical endurance 107 Electrical endurance 10° Static Outputs NO Static Outputs NO Number of static output type NO NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type lsolated RS485 serial interface Baud rate bps 1200115200 | Measuring range | | °C | -40+85 |
| Number of digital input Nr. 8 Digital input type Negative Digital input current mA ≤6 High digital input signal V ≥4.9V (typical 3.8V) Low digital input signal √ ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs T T Relay outputs Nr. 7 Mechanical endurance 10° T Electrical endurance 10° T Electrical endurance 10° T Static Outputs NO NO Number of static output 1 (OUT10) T Static output type NO NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type bps 1200115200 | Maximum connection lenght | | mt | 3m |
| Digital input type Negative Digital input current mA ≤6 High digital input signal V ≥4.9V (typical 3.8V) Low digital input signal Y ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs T Rated current (le) A /1A or /5A Relay outputs V 7 Number of relay output Nr. 7 Mechanical endurance 10° 10° Electrical endurance 10° 5 Static Outputs NO NO Operating voltage NO NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type lsolated RS485 serial interface Baud rate bps 1200115200 | Digital inputs | | | |
| Digital input current mA ≤6 High digital input signal V ≥4.9V (typical 3.8V) Low digital input signal V ≤1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Number of relay output Nr. 7 Mechanical endurance 10° 10° Electrical endurance 10° 5 Static Outputs NO NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type lsolated RS485 serial interface Baud rate bps 1200115200 | Number of digital input | | Nr. | 8 |
| High digital input signal Low digital input signal V ≤1.25V (typical 3.8V) Digital input signal delay Digital input signal delay Rated current (le) Rated current (le) Relay outputs Number of relay output Nr. 7 Mechanical endurance Electrical endurance Tof Static Outputs Number of static output Number of static output Static output type Operating voltage No Operating voltage Interface type Baud rate Baud rate V ≤1.25V (typical 2.3V) A /1A or /5A To /1A or /5A To /1A or /5A To /1A or /5A Interface type Static Outputs No I (OUT10) Static output type I (OUT10) Static output type I (Solated RS485 serial interface | | | | Negative |
| Low digital input signal V \$3.8V) Low digital input signal V \$1.25V (typical 2.3V) Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Number of relay output Nr. 7 Mechanical endurance 10° 10° Electrical endurance 10° Static Outputs Number of static output NO NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type Baud rate bps 1200115200 | Digital input current | | mΑ | ≤6 |
| Digital input signal delay ms ≥50 Current inputs Rated current (le) A /1A or /5A Relay outputs Number of relay output Nr. 7 Mechanical endurance 107 Electrical endurance 105 Static Outputs Number of static output 1 (OUT10) Static output type NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Interface type Isolated RS485 serial interface Baud rate bps 1200115200 | High digital input signal | | V | |
| Current inputs Rated current (le) A /1A or /5A Relay outputs Nr. 7 Number of relay output Nr. 7 Mechanical endurance 107 Electrical endurance 105 Static Outputs Number of static output 1 (OUT10) Static output type NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Baud rate bps 1200115200 | Low digital input signal | | V | |
| Rated current (le) A /1A or /5A Relay outputs Nr. 7 Number of relay output Nr. 7 Mechanical endurance 10 ⁷ Electrical endurance 10 ⁵ Static Outputs NUMBER Number of static output 1 (OUT10) Static output type NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type Isolated RS485 serial interface Baud rate bps 1200115200 | Digital input signal delay | | ms | ≥50 |
| Relay outputs Nr. 7 Mechanical endurance 10 ⁷ Electrical endurance 10 ⁵ Static Outputs Number of static output Number of static output type NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type Baud rate bps 1200115200 | Current inputs | | | |
| Number of relay output Nr. 7 Mechanical endurance 107 Electrical endurance 105 Static Outputs 1 (OUT10) Number of static output NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Isolated RS485 serial interface Interface type Isolated RS485 serial interface Baud rate bps 1200115200 | Rated current (le) | | Α | /1A or /5A |
| Mechanical endurance 107 Electrical endurance 105 Static Outputs | Relay outputs | | | |
| Electrical endurance Static Outputs Number of static output Static output type Operating voltage Maximum current RS485 serial interface Interface type Baud rate 105 1 (OUT10) 1 (OUT10) NO NO V 1030VDC mA 50mA Isolated RS485 serial interface bps 1200115200 | Number of relay output | | Nr. | 7 |
| Static OutputsNumber of static output1 (OUT10)Static output typeNOOperating voltageV 1030VDCMaximum currentmA 50mARS485 serial interfaceIsolated RS485 serial interfaceBaud ratebps 1200115200 | Mechanical endurance | | | 10 ⁷ |
| Number of static output Static output type NO Operating voltage V 1030VDC Maximum current mA 50mA RS485 serial interface Interface type Baud rate bps 1200115200 | Electrical endurance | | | 10 ⁵ |
| Static output type Operating voltage Maximum current MA 50mA RS485 serial interface Interface type Baud rate NO V 1030VDC Max 50mA Isolated RS485 serial interface bps 1200115200 | Static Outputs | | | |
| Static output type Operating voltage Maximum current MA 50mA RS485 serial interface Interface type Baud rate NO V 1030VDC Max 50mA Isolated RS485 serial interface bps 1200115200 | Number of static output | | | 1 (OUT10) |
| Maximum current mA 50mA RS485 serial interface Interface type Baud rate mA 50mA Isolated RS485 serial interface bps 1200115200 | Static output type | | | |
| Maximum current mA 50mA RS485 serial interface Interface type Baud rate mA 50mA Isolated RS485 serial interface bps 1200115200 | Operating voltage | | V | 1030VDC |
| Interface type Baud rate Isolated RS485 serial interface bps 1200115200 | | | mΑ | 50mA |
| Baud rate serial interface bps 1200115200 | RS485 serial interface | | | |
| Baud rate bps 1200115200 | Interface type | | | |
| · · · · · · · · · · · · · · · · · · · | | | | |
| Insulation voltage (RS485-Vbatt) 1kVDC | | | bps | |
| | Insulation voltage (RS485-Vbatt) | | | 1kVDC |

CCONTROLLER FOR ELECTRIC FIRE PUMPS IN ACCORDANCE WITH EN12845, POWER SUPPLY 24VAC, BUILT-IN RS485

| Connections | | | | | |
|-------------------------|-----------------------|---|------------|---------------|----------------------|
| Type of terminal | | | | | Removable screw-type |
| Conductor cross secti | | | | | |
| | AWG/Kcmil | | •. | A1A/O | 0.4 |
| | | | min Max | AWG AWG | 24 12 |
| | IEC | | iviax | AWG | 12 |
| | 120 | | min | mm² | 0.2 |
| | | | Max | mm² | 2.5 |
| Tightening torque for t | erminals | | | | |
| | | | max | Nm | 0.56 |
| | | | max | lbin | 5 |
| Ambient conditions | | | | | |
| Temperature | Operating temperature | 2 | | | |
| | Operating temperature | 5 | min | °C | -25 |
| | | | max | °C | +70 |
| | Storage temperature | | | | |
| | | | min | °C | -30 |
| - | | | max | °C | +80 |
| Relative humidity | | | | % | <80% (IEC/EN |
| Housing | | | | | 60068-2-78) |
| Execution | | | | | Flush-mount |
| Material | | | | | Polycarbonate |
| | | | | | IP65 Frontal; |
| Degree of protection | | | | | IP20 on terminals |
| Dimensions (W x H x I | D) | | | mm | 240 x 180 x 43.9 |
| Weight | | | | g | 980 |
| Dimensions | | | _ | 220 (8.66*) — | |
| 180 (7.097) | 0.40 (9.45°) | EXP (1.30) (81.9) (81.9) (81.14) 56.4 (2.22) (0.44) | | | 160 (6.307) |

Wiring diagrams

CCONTROLLER FOR ELECTRIC FIRE PUMPS IN ACCORDANCE WITH EN12845, POWER SUPPLY 24VAC, BUILT-IN RS485



Certifications and compliance

Compliance

IEC/EN 61000-6-2

IEC/EN 61000-6-3

IEC/EN 61010-1

IEC/EN 61010-2-030

UNI EN 12845

Certificates

1

ETIM classification

ETIM 8.0

EC002685 -Central fire alarm control panel