ULYS FLEX Modbus

Metering solution on Rogowski coils

Quick set-up
Reduced installation costs
Wide dynamic range for measurement (0.3 A to 20,000 A)
RS485 Modbus RTU communication
ISO 50001
Specifications

Auxiliary Power Supply

- Voltage range: 85...265 V Ac
- Safety: 300 V CAT II
- Maximum consumption: 10 VA - 7W
- Type: for mounting on exterior
- Frequency: 50/60 Hz

Voltage Measurement

- Voltage range: 3x0/1...3x16/493 VAC — 50/60 Hz
- Safety: 300 V CAT II
- Minimum voltage for FFT calculation: 20.5/VC (multiplied by the VT ratio) with direct connection

Current Measurement

- Maximum value: 3 selectable ratings (FSA = Full Scale Ampere): 500 A (700 A max), 4,000 A (5,600 A max), or 20,000 A (28,000 A max.)
- Inrush current (IST): 0.3 A for FSA 500 A, 1 A for FSA 4,000 A, 10 A for FSA 20,000 A
- Minimum for FFT calculation: 70 A for FSA 500 A, 400 A for FSA 4,000 A, 1,500 A for FSA 20,000 A
- 2 % accuracy of harmonics ± 2 digits

Accuracy

- Voltage: ± 0.2 % of reading in the range 10 % FS ... FS (FS = Full Scale)
- Current: ± 0.4 % of reading in the range 5 % FS ... FS
- Power: ± 0.5 % of reading ± 0.1 % FS (PF=1)
- Frequency: ± 0.1 % of reading ± 1 digit in the range 45 ... 65 Hz
- Active energy: Class 1 compliant with IEC/EN 62053-21
- Reactive energy: Class 2 compliant with IEC/EN 62053-23

Screen & Keypad

- Display: Backlit LCD, 43 x 29 mm — 3 lines, 4 digits + symbols
- Keypad: 3 keys + 1 protected button

Communication Port

- Type: Optical-isolated RS485
- Baud rate: 300 ... 57,600 bps

Digital Output (DO)

- Type: Passive, optical-isolated, polarized electronic output
- Maximum values (compliant with IEC/EN 62053-31): 27 VDC - 27 mA
- Energy pulse length (for DO in Pulse mode): 50 ± 2 ms ON time
- Maximum frequency: 8 pulses per second (8 Hz)
- Maximum reaction time (for DO in Alarm mode): 1 s

Dimensions & Weight

- L x H x W, weight: 72 x 90 x 65 mm, max. 436 g

Environmental Conditions

- Operating temperature: -25 °C ... + 55 °C
- Storage temperature: -25 °C ... + 75 °C
- Max. humidity (without condensation): 80 %
- Altitude for product operation: < 2,000 m
- Vibrations or shocks (sinusoidal amplitude): 50 Hz ± 0.075 mm
- Ingress Protection - front panel: IP51 (for mounting in a box or cabinet with equivalent or higher protection)
- Ingress Protection - terminal blocks: IP20
- Pollution degree: 2
- Installation and use: Indoor

Compliance with Standards

- Safety: EN50160-1 EN 61000-2-030 EN 61000-2-032
- Electromagnetic Compatibility (EMC): EN50160-1, EN 55011, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6, EN 61000-4-8

To order

- ULYSFLEX Modbus loop 30/3
- ULYSFLEX Modbus loop 70/3
- ULYSFLEX Modbus loop 30/10
- ULYSFLEX Modbus loop 70/10

Installation on busbars or conductors with large dimensions or cross-sections
- Possibility of inserting the flexible coils in confined spaces
- Mounting of ULYSFLEX Modbus without cutting off the electrical feeder
- Guarantee of the accuracy class over a wide range for current measurement (5 % to 100 % of full scale)

Connection

Meter dimension (mm)

Dimensions of Rogowski coils

<table>
<thead>
<tr>
<th>MODEL</th>
<th>L (cm)</th>
<th>Ø (cm)</th>
<th>L (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULYSFLEX Modbus loop 30/3</td>
<td>30</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>ULYSFLEX Modbus loop 70/3</td>
<td>70</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>ULYSFLEX Modbus loop 30/10</td>
<td>30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>ULYSFLEX Modbus loop 70/10</td>
<td>70</td>
<td>22</td>
<td>10</td>
</tr>
</tbody>
</table>

ULYSFLEX submeters
ELOG DATA LOGGER
E.ONLINE 3 software
Radio Frequency solutions

Export

Chauvin Arnoux Energy
16, rue Georges Besse
92182 Antony Cedex - FRANCE
Tel: +33 1 75 60 10 30
Fax: +33 1 46 66 62 54
export@enerdis.fr
www.chauvin-arnoux-energy.com

United Kingdom

Chauvin Arnoux Ltd
Unit 1 Nelson Ct, Flagship Sq., Shaw Cross Business Pk.
Dewsbury, West Yorkshire - WF12 7TH
Tel: +44 1924 460 494
Fax: +44 1924 455 328
info@chauvin-arnoux.co.uk
www.chauvin-arnoux.com

Middle East

Chauvin Arnoux Middle East
P.O. BOX 60-154
1241 2020 JAL EL DIB - LEBANON
Tel: +961 1 890 425
Fax: +961 1 890 424
carrie@chauvin-arnoux.com
www.chauvin-arnoux.com