

FDV BLAD FOR ENTES NETTANALYSATOR

GENERELT FORVALTNING

Entes Nettanalysator type MPR-3X og 4X-serie er designet for å måle alle parametere i et elektrisk nettverk.

Operating Conditions	Range
Supply Voltage	45 ~ 300 V AC/DC (MPR4X) 24 ~ 60 V AC/DC (MPR4X-D)
Supply Frequency	45 ~ 65 Hz.
Maximum Measuring Current	5,5 A
Maximum Measuring Voltage	690 VAC (VLL)
Operating Temperature	-5 ~ +55 °C
Storing Temperature	-25 ~ +70 °C
Maximum Ambient Humidity	90%
Communication Speed	2400 ~ 115200 bps

DRIFT

Renhold: Ingen spesifikke krav til renhold. Unngå bruk av vann.
Energiforbruk: Ikke relevant
Henvisninger: For ytterligere informasjon, kontakt Cenika AS

VEDLIKEHOLD

Rutiner:
Levetid: Ansees å vare lenge

TILBEHØR

CV046756	MÅLERTRANSFORMATOR 40/5 Kabelåpning 31*18mm
CV046763	MÅLERTRANSFORMATOR 75/5 Kabelåpning 31*18mm
CV046770	MÅLERTRANSFORMATOR 125/5 Kabelåpning 31*18mm
CV046787	MÅLERTRANSFORMATOR 250/5 Kabelåpning 31*18mm
CV046794	MÅLERTRANSFORMATOR 400/5 Kabelåpning 41*22mm
CV046800	MÅLERTRANSFORMATOR 800/5 Kabelåpning 61*62mm
CV046817	MÅLERTRANSFORMATOR 1250/5 Kabelåpning 61*62mm
CV046879	MÅLERTRANSFORMATOR 1600/15 Kabelåpning 75*62mm
CV046824	MÅLERTRANSFORMATOR 2500/5 Kabelåpning 101*93,5mm
CV046831	MÅLERTRANSFORMATOR 3200/5 Kabelåpning 101*93,5mm

PRODUKT

CV046855	NETTANALYSATOR MPR-34S 68*68mm
CV046848	NETTANALYSATOR MPR-45 92*92mm
CV046862	NETTANALYSATOR MPR-47S 92*92mm

MPR-3 Series Products

Product Code	Dimensions / mm	3xV, 3xI, Frequency, W, VA, VA _{2P} , I _{2P} , I _S , kWh, kVAh, kVAh Demand, Max., Min. Cosφ, I neutral	THD-I %	THD-V %	RS-485	Digital Input	Digital Output	Pulse Output	Real Time Clock (RTC)	Operating Hour Meter	Alarm	Event Logs	Pcs/Box
MPR-32	72x72	●							●	●			24
MPR-34-11	72x72	●	●	●		1	1	●	●	●	●	●	24
MPR-34S-11	72x72	●	●	●	●	1	1	●	●	●	●	●	24
MPR-34-20	72x72	●	●	●		2			●	●	●	●	24
MPR-34S-20	72x72	●	●	●	●	2			●	●	●	●	24

MPR-4 Series Products

Product Code	Dimensions / mm	3xV, 3xI, Frequency, W, VA, VA _{2P} , I _{2P} , I _S , kWh, kVAh, kVAh Demand, Max., Min. Cosφ, I neutral	45 ~ 300 V AC/DC	24 ~ 60 V AC/DC	THD-I %	THD-V %	Individual Harmonics	RS-485	Digital Input	Digital Output	Analog Output (mAVV)	Relay Output	Pulse Output	Real Time Clock	Memory	Voltage/Current Unbalances	Sag/Swell	Pulse Counter	Operating Hours Meter	Alarm	Event Logs	Profile Records	Tariff	Pcs/Box
MPR-45	96x96	●	●						*	*	*	*	*	●				●	●	●			24	
MPR-45S	96x96	●	●					●	*	*	*	*	*	● 16MB				●	●	●	●	●	24	
MPR-46	96x96	●	●	●	●				*	*	*	*	*	●			*	●	●	●			24	
MPR-46S	96x96	●	●	●	●			●	*	*	*	*	*	● 16MB			*	●	●	●	●	●	24	
MPR-47S	96x96	●	●	●	●	51		●	*	*	*	*	*	● 16MB	●	●	*	●	●	●	●	●	24	
MPR-47S-D	96x96	●	●	●	●	51		●	*	*	*	*	*	● 16MB	●	●	*	●	●	●	●	●	24	

TEKNISK INFO 3X-SERIE

Operating Voltage (Un)	185-300 VAC/DC
Operating Frequency (f)	45-65 Hz
Supply Input Burden	<5 VA
Voltage Measuring Input Burden	<0.5 VA
Current Measuring Input Burden	<1 VA
Measuring Voltage Input (Vin)	10 – 400 VAC (L-N) 10 – 690 VAC (L-L)
Voltage Measuring Range with Transformer	10 – 999 kV
Measuring Current Input (Iin)	0.05 – 5.5A ~
Current Measuring Range with Transformer	0.05 – 10 kA
Power Measuring Range	0 – 1 G (W, VAr, VA)
Energy Measuring Range	9999999.9 k (Wh, VArh)
Class	
Voltage	0.5%
Current	0.5%
Frequency	0.1%
cosφ	±0.2%
Active Power	1%, Class 1
Reactive Power	1%, Class 2
Demand Time	Adjustable between 1-60 minutes
Communication (Isolated)	MODBUS RTU (RS-485)
Baud Rate	2400 – 115200 bps
Address	1 – 247
Parity	None, Even, Odd
Stop Bit	1
Max Communication Distance	1200 m (MODBUS/RS-485 side, with signal amplifier)
Internal Memory	1MB
Digital Input Operating Voltage	5...48 VDC
Digital Input Switching Current	Max. 50 mA
Minimum Pulse Period	100 ms pulse period, 80 ms pulse width
Connection Type	3P4W, 3P3W, ARON, 3P4W balanced, 3P3W balanced
Operating Temperature	-10...+55°C
Storage Temperature	-20...+70°C
Humidity	Maximum 90%
Display	Backlit FSTN Custom LCD
Real Time Clock	Available
Tariffs	8+1 (Generator)
Dimensions	72x72x70 mm
Device Protection Class	Double Insulation
Front Panel Protection Class	IP51
Terminals Protection Class	IP20
Enclosure Material	Nonflammable
Installation	Front Panel Mounting
Cable Thickness For Voltage Connection	Max. 2.5 mm ²
Cable Thickness For Current Connection	Max. 2.5 mm ²
Cable Thickness For RS-485 Connection	CAT 5 Cable
Weight	230 gr

FDV BLAD FOR ENTES NETTANALYSATOR

TEKNISK INFO 4X-SERIE

Operating Voltage (Un)	45 ~ 300 V AC/DC (MPR4X) 24 ~ 60 V AC/DC (MPR4X-D)
Operating Frequency (f)	45-65 Hz
Supply Input Burden	<5 VA
Supply Input Burden	<1 VA
Measuring Voltage Input (Vin)	10 – 300 VAC (L-N) 10 – 690 VAC (L-L)
Measuring Current Input (Iin)	0.05 – 5.5A ~
Measuring Power Range	0...9999 MW
Measuring Energy Range	9999999.9 k/M (Wh, VArh)
Class	
Voltage	0.5%
Current	0.5%
Frequency	0.1%
cosφ	±0.2%
Active Power	1%
Reactive Power	1%
Active Power Energy	1%
Reactive Power Energy	2%
Current Transformer Ratio (Ctr)	1...5000
Voltage Transformer Ratio (Vtr)	1MV / measurement
Demand Time	Adjustable between 1-60 minutes
Communication (Isolated)	MODBUS RTU (RS-485)
Baud Rate	2400 – 115200 bps
Address	1 – 247
Parity	None, Even, Odd
Stop Bit	1
Max Communication Distance	1200 m (MODBUS/RS-485 side, with signal amplifier)
Internal Memory	16MB
Relay Outputs (2 pcs, with module)	2 NO, 5 A, 1250 VA
Pulse Outputs (4 pcs, with module)	Modular
Pulse Width	t-ON = ≥ 30 ms
Time between two pulse peaks	t-OFF = ≥ 30 ms
Transition Time	t-T = ≤ 5 ms
Digital Inputs (4 pcs, with module)	12...48 VAC/DC
Analog Voltage Output (2 pcs, with module)	0 – 10 V, ±5 V, ±10 V
Analog Current Output (2 pcs, with module)	0/4 – 20mA, 4-24 mA
Connection Type	3P4W, 3P3W, ARON, 3P4W balances, 3P3W balanced
Harmonics Measurement (For MPR-47S)	2nd – 51st Harmonics
Operating Temperature	-5...+55°C
Storage Temperature	-20...+70°C
Humidity	Maximum 90%
Display	Backlit FSTN Custom LCD
Data Logging	Available
Real Time Clock	Available
Tariffs	8+1 (Generator)
Dimensions	96x96x50 mm
Device Protection Class	Double Insulation
Front Panel Protection Class	IP51
Terminals Protection Class	IP20
Enclosure Material	Nonflammable
Installation	Front Panel Mounting
Cable Thickness For Voltage Connection	Max. 2.5 mm ²
Cable Thickness For Current Connection	Max. 2.5 mm ²
Cable Thickness For RS-485 Connection	CAT 5 Cable
Weight	0.335 kg/pcs