2021-07-01

UAB Vilniaus Vandenys

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PATIKSLINIMO PAAIŠKINIMAS (CVP IS NR. 545442)

Patikslinimas dėl pasiūlyme pateikiamų pozicijų Nr. 57 ; 58.

Tiekėjai neturi pasidaręs atskirų techninių aprašymų, turi tik bendrą aprašymą / naudojimosi instrukciją savo skaitiklių serijai, tad bandome paaiškinti kaip naudotis instrukciją ir aprašyti parametrus.

Instrukcija yra pritaikyta tiesioginio jungimo iki 100A ir netiesioginio jungimo, per srovės transformatorius, skaitikliams: **PRO380-S** (tik su impulsiniu išėjimu), **PRO380-MOD** (ModBus protokolas). **PRO380-Mb** (M-BUS protokolas).

Siūlomi skaitiklių tipai ir aprašymai:

PRO380-MOD – 3-fazis elektros energijos skaitiklis, tiesioginio jungimo iki 100A, Modbus

PRO380-MOD-CT -3-fazis elektros energijos skaitiklis, netiesioginio jungimo, per srovės transformatorius, Modbus

"CT" (current transformer) nurodo, kad skaitiklis jungiamas per srovės transformatorius.

Instrukcijoje yra nurodomos pajungimo galimybės, standariškai Lietuvoje tinkamos tokios pasjungimo schemos:
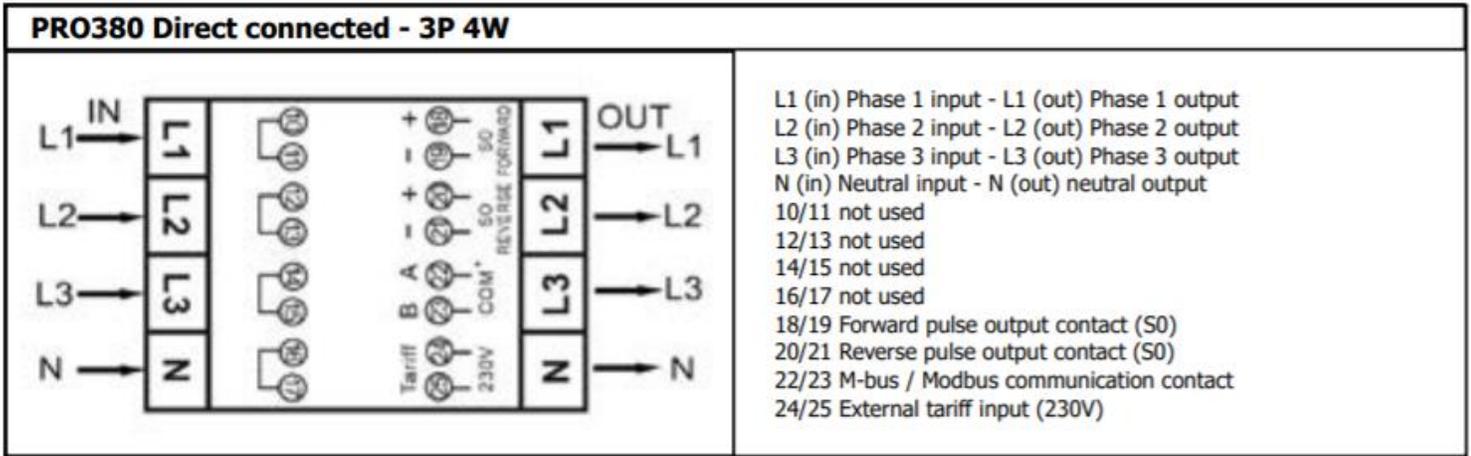
Tiesioginio pajungimo **PRO380-MOD** pajungimo schema:
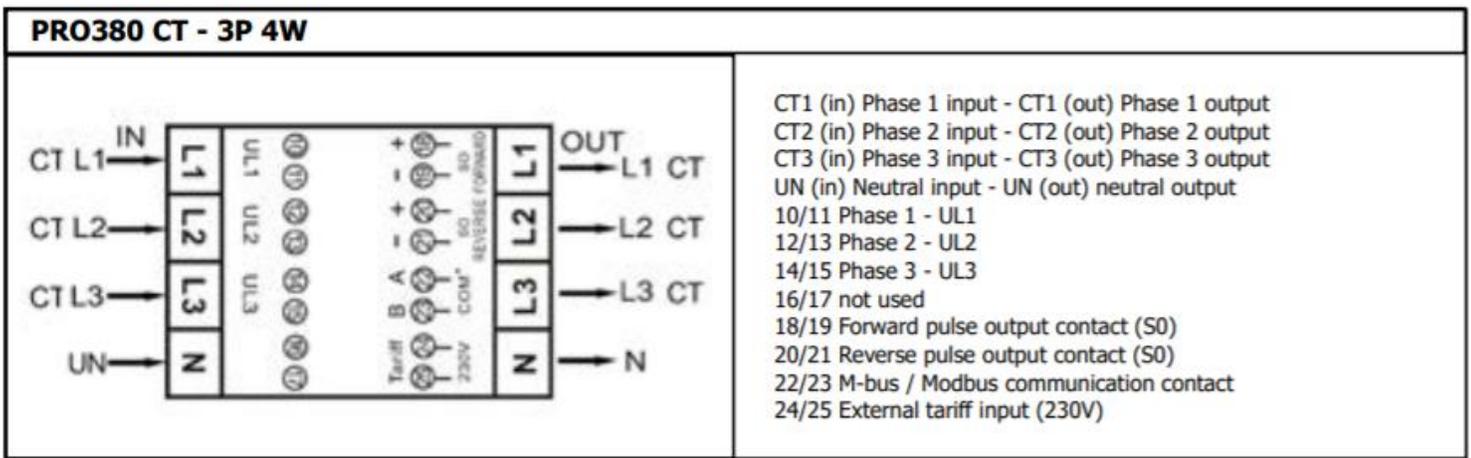
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Įmonės kodas 302409283. PVM kodas LT100004794310
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PRO380 Direct connected - 3P 4W

L1 (in) Phase 1 input - L1 (out) Phase 1 output
L2 (in) Phase 2 input - L2 (out) Phase 2 output
L3 (in) Phase 3 input - L3 (out) Phase 3 output
N (in) Neutral input - N (out) neutral output
10/11 not used
12/13 not used
14/15 not used
16/17 not used
18/19 Forward pulse output contact (S0)
20/21 Reverse pulse output contact (S0)
22/23 M-bus / Modbus communication contact
24/25 External tariff input (230V)

Netiesioginio pajungimo skaitiklio **PRO380-MOD-CT** pajungimo schema:

PRO380 CT - 3P 4W

CT1 (in) Phase 1 input - CT1 (out) Phase 1 output
CT2 (in) Phase 2 input - CT2 (out) Phase 2 output
CT3 (in) Phase 3 input - CT3 (out) Phase 3 output
UN (in) Neutral input - UN (out) neutral output
10/11 Phase 1 - UL1
12/13 Phase 2 - UL2
14/15 Phase 3 - UL3
16/17 not used
18/19 Forward pulse output contact (S0)
20/21 Reverse pulse output contact (S0)
22/23 M-bus / Modbus communication contact
24/25 External tariff input (230V)

Instrukcijoje (nuo 27 psl) yra nurodoma MODBUS registrų žemėlapis, t.y. kokiais adresais galite pasiekti tam tikrą informaciją (kiekvienos fazes įtampą, srovę, suvartotą energiją, bendrą apkrovą ir kitą informaciją.

Reg. address	Content	Function code	Register length	Unit	Data type
5000	Voltage*	03	2	V	Float ABCD
5002	L1 Voltage	03	2	V	Float ABCD
5004	L2 Voltage	03	2	V	Float ABCD
5006	L3 Voltage	03	2	V	Float ABCD
5008	Grid frequency	03	2	Hz	Float ABCD
500A	Current*	03	2	A	Float ABCD
500C	L1 Current	03	2	A	Float ABCD
500E	L2 Current	03	2	A	Float ABCD
5010	L3 Current	03	2	A	Float ABCD
5012	Total active power	03	2	kW	Float ABCD
5014	L1 Active power	03	2	kW	Float ABCD
5016	L2 Active power	03	2	kW	Float ABCD
5018	L3 Active power	03	2	kW	Float ABCD
501A	Total reactive power	03	2	kvar	Float ABCD
501C	L1 Reactive power	03	2	kvar	Float ABCD
501E	L2 Reactive power	03	2	kvar	Float ABCD
5020	L3 Reactive power	03	2	kvar	Float ABCD
5022	Total apparent power	03	2	kVA	Float ABCD
5024	L1 Apparent power	03	2	kVA	Float ABCD
5026	L2 Apparent Power	03	2	kVA	Float ABCD
5028	L3 Apparent Power	03	2	kVA	Float ABCD
502A	Power factor	03	2	-	Float ABCD
502C	L1 Power factor	03	2	-	Float ABCD
502E	L2 Power factor	03	2	-	Float ABCD
5030	L3 Power factor	03	2	-	Float ABCD

Reg. address	Content	Function code	Register length	Unit	Data type
6000	Total active energy	03	2	kWh	Float ABCD
6002	T1 Total active energy	03	2	kWh	Float ABCD
6004	T2 Total active energy	03	2	kWh	Float ABCD

Instrukcijoje (15psl.) rodoma kaip ir kokius parametrus galite matyti ekranėlyje:

Button scroll: press the buttons for less than 3 seconds to scroll. After 30 seconds of no interaction the meter goes back to automatic scroll mode

Current direction				
IF 2F 3r				

Hold the right button for 3 seconds to enter the next menu. Hold the left button for 3 seconds to go back.

Display Shows:

Current direction	Comb. active status word	Serial number	Software version	Software version
IF 2F 3r	5 11 111	17100247	SOFt	00000000

Total active energy	Total active energy	T1 active energy	T2 active energy	Total FW active energy	T1 FW active energy	T2 FW active energy
12345678	12345678	12345678	12345678	12345678	12345678	12345678
	Total RV active energy	T1 RV active energy	T2 RV active energy	L1 total active energy	L1 FW active energy	L1 RV active energy
	12345678	12345678	12345678	12345678	12345678	12345678
	L2 total active energy	L2 FW active energy	L2 RV active energy	L3 total active energy	L3 FW active energy	L3 RV active energy
	12345678	12345678	12345678	12345678	12345678	12345678

Total reactive energy	Total reactive energy	T1 reactive energy	T2 reactive energy	Total FW reactive energy	T1 FW reactive energy	T2 FW reactive energy
12345678	12345678	12345678	12345678	12345678	12345678	12345678
	Total RV reactive energy	T1 RV reactive energy	T2 RV reactive energy	L1 total reactive energy	L1 FW reactive energy	L1 RV reactive energy
	12345678	12345678	12345678	12345678	12345678	12345678
	L2 total reactive energy	L2 FW reactive energy	L2 RV reactive energy	L3 total reactive energy	L3 FW reactive energy	L3 RV reactive energy
	12345678	12345678	12345678	12345678	12345678	12345678

Total active power	Total active power	L1 active power	L2 active power	L3 active power	Total apparent power	L1 apparent power
00045.000	00045.000	12345.000	12345.000	12345.000	12345.000	12345.000
	L2 apparent power	L3 apparent power	Total COS	L1 COS	L2 COS	L3 COS
	12345.000	12345.000	1 L 0.100	1 L 0.100	1 L 0.100	1 L 0.100
	Grid frequency	Total reactive power	L1 reactive power	L2 reactive power	L3 reactive power	L1 Voltage
	50.00	C000 1000	C000 1000	C000 1000	0000 1000	230.0
	L2 Voltage	L3 Voltage	L1 Current	L2 Current	L3 Current	
	230.0	230.0	0.10000	0.10000	0.10000	

Resettable kWh	Resettable kWh	Hold the right button

Alius Špakas.