

THYTRONIC S.p.A.Headquarter
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35127 PADOVA (ITALY) – Z.I. Sud – Via dell'Artigianato, 48 – Tel. 0498947701 – Fax 0498701390**TEST REPORT**

Model:	PRON	Code:	NV10P-JA2TM00
Serial number:	210742		
Ver.sw :	03.21	DSP fw Rel :	2.11
ID SW SCA:	TFNV10 Ver. 3.00	Id Report:	NV10_F_210742_2015_0
Date of Test	18/03/15		

Preliminary Tests

Visual Inspection	PASS
High Voltage test (50Hz)	PASS

Functional Tests

Power Consumption	PASS
Man Machine Interface	PASS
I/O (Digital Inputs & Relays)	PASS
Voltage Inputs	PASS
Frequency Measurement	PASS
Threshold precision	PASS
Trip Time precision	PASS

EQUIPMENT OK

Tested by: Silvano Gastaldello

Validator: Federico La Greca

FUNCTIONAL TESTS**Power Consumption**

Power consumption from Aux (110V-) at rest.	Power (6.5...8.5 W) =	PASS 7.1 W
Max Power consumption from Aux (110V-)	Power (8.5...11.5 W) =	PASS 9.9 W

Man Machine Interface

LED	PASS
Display & keyboard	PASS

Digital Inputs & Relays

Digital Input 1	PASS
Digital Input 2	PASS
Relays Contacts	PASS

Voltage Analog Inputs

UL1 Readings (@ V = 0.010 UN)	(0.009 ... 0.011 UN) =	0.010 UN
(@ V = 0.100 UN)	(0.097 ... 0.103 UN) =	0.100 UN
(@ V = 0.500 UN)	(0.485 ... 0.515 UN) =	0.499 UN
(@ V = 1.000 UN)	(0.970 ... 1.030 UN) =	0.996 UN
(@ V = 2.00 UN)	(1.940 ... 2.060 UN) =	1.985 UN
UL2 Readings (@ V = 0.010 UN)	(0.009 ... 0.011 UN) =	0.010 UN
(@ V = 0.100 UN)	(0.097 ... 0.103 UN) =	0.100 UN
(@ V = 0.500 UN)	(0.485 ... 0.515 UN) =	0.497 UN
(@ V = 1.000 UN)	(0.970 ... 1.030 UN) =	0.997 UN
(@ V = 2.00 UN)	(1.940 ... 2.060 UN) =	1.985 UN
UL3 Readings (@ V = 0.010 UN)	(0.009 ... 0.011 UN) =	0.010 UN
(@ V = 0.100 UN)	(0.097 ... 0.103 UN) =	0.100 UN

	(@ V = 0.500 UN)	(0.485 ... 0.515 UN) =	0.498 UN
	(@ V = 1.000 UN)	(0.970 ... 1.030 UN) =	0.996 UN
	(@ V = 2.00 UN)	(1.940 ... 2.060 UN) =	1.985 UN
UE Readings	(@ V = 0.010 UEN)	(0.009 ... 0.011 UEN) =	0.010 UEN
	(@ V = 0.100 UEN)	(0.097 ... 0.103 UEN) =	0.100 UEN
	(@ V = 0.500 UEN)	(0.485 ... 0.515 UEN) =	0.502 UEN
	(@ V = 1.000 UEN)	(0.970 ... 1.030 UEN) =	1.001 UEN
	(@ V = 1.50 UEN)	(1.455 ... 1.545 UEN) =	1.490 UEN

Frequency measurement

Freq Readings (@ 49.700 Hz)	(49.680 ... 49.720 Hz) =	49.698 Hz
(@ 50.000 Hz)	(40.980 ... 50.020 Hz) =	50.002 Hz
(@ 50.300 Hz)	(50.280 ... 50.320 Hz) =	50.300 Hz

81 F< threshold (@ F< = 0.995 FN)

Pick Up U> & DropOut Ratio

Pick Up (49.730...49.770 Hz) =	PASS
Drop Out =	49.746 UN
Reset Ratio (%) =	49.822 UN
Max Error (%) =	100.2 %
	-0.005 %

27 U< threshold (@ U< = 0.80 UN)

Pick Up U> & DropOut Ratio (Phase L1)

Pick Up (0.768...0.832 In) =	PASS
Drop Out =	0.802 UN
Reset Ratio (%) =	0.835 UN
Max Error (%) =	104 %
	0.23 %

Pick Up U> & DropOut Ratio (Phase L2)

Pick Up (0.768...0.832 In) =	PASS
Drop Out =	0.803 UN
Reset Ratio (%) =	0.835 UN
Max Error (%) =	104 %
	0.40 %

Pick Up U> & DropOut Ratio (Phase L3)

Pick Up (0.768...0.832 In) =	PASS
Drop Out =	0.802 UN
Reset Ratio (%) =	0.834 UN
Max Error (%) =	104 %
	0.23 %

59E UE> threshold (@ UE> = 0.050 UEN)

Pick Up I> & DropOut Ratio

Pick Up (0.00480...0.00520 In) =	PASS
Drop Out =	0.0500 UEN
Reset Ratio (%) =	0.0480 UEN
Max Error (%) =	96 %
	0.00 %

Trip Time precision

81< F< = 0.995 FN
t> = 0.060 s

Trip Time on Phase L1

Trip Time (0.049...0.071 s) =	PASS
Reset Time =	0.052 s
	35.7 ms

27 U< = 0.800 IN
t> = 0.050 s

Trip Time on Phase L1

Trip Time (0.039...0.061 s) =	PASS
Reset Time =	0.044 s
	31.0 ms

Trip Time on Phase L2

Trip Time (0.039...0.061 s) =	PASS
Reset Time =	0.043 s
	25.9 ms

Trip Time on Phase L3

Trip Time (0.039...0.061 s) =	PASS
Reset Time =	0.044 s
	31.1 ms

59N UE> = 0.050 UEN
tE> = 0.070 s

Trip Time

Trip Time (0.059...0.081 s) =	PASS
Reset Time =	0.064 s
	25.8 ms