VD4 F PANEL DIGITAL READOUT INPUT BY LOGIC SIGNAL

OPERATING MANUAL

Digital readouts series **VD4 F** accept as input square wave signals with a frequency value proportional to the measure to be displayed. Possible input transducers are: monodirectional incremental encoders, PNP or push-pull self-amplified inductors.

The value of the displayed magnitude can be adjusted between −9999 and 9999. In case of values beneath −999 the minus sign is indicated by a dot placed on the right side of the less significative digit.

TECHNICAL SPECIFICATIONS:

Supply	24 Vac or 115/230 Vac ±10% 50/60 Hz
	12 or 24Vdc ±15%* (see the supply label)
Power consumption	4 VA max (version 24/115/230 Vac)
	2.5 Watt (version 12 Vdc)
	5 Watt (version 24 Vdc)
Display type	4-digit 7-segment LED display 12.7 mm high
Data and preset storing	on FLASH memory
Display range	-9999 / 9999
Decimal digits	settable: 0, 1 ,2 or 3
Operating temperature	0 ÷ 45 °C
Panel cut off	91 x 44 mm
Time base accuracy	±2.5%
Input signal max frequency	10 KHz
Input logic level '0'	1.5 Vdc max
Input logic level '1'	3.5 Vdc min
Input logic level '0' min. T	50 microsec.
Input logic level '1' min. T	50 microsec.
Input voltage limit values	-30 / +30 Vdc
Input impedance	100 KOhm
Transducer supply voltage	12 Vdc not stabilized ±20%
Front case protection degree	IP54

*Remark: In case of direct current supply the negative pole of the supply voltage (terminal 1) is connected to O Vdc of the input circuit (terminal 7).

OPERATING DESCRIPTION

At power on the instrument displays the software version identification for one second: T-XX-, where XX is the number of the loaded software; afterwards the displays switches to the *main display page.*

SETUP PHASE

The *SETUP phase is* accessed by digiting the following *key sequence*: press the key *F* for 3 seconds and, when the display shows: SET, enter the following *access key*: ARROW UP, F, ARROW UP, ARROW UP, F.

If the access key is not entered within 10 seconds the instrument switches back to the main display page.

The SETUP menu includes the following items list, which can be scrolled down by the key *F:*

b.t.	(time base)	Default: 1.00 S
n.dEC	(decimal digits)	Default: 0
du.no	(pulses x 2)	Default: no

KEYS FUNCTION

ARROW UP   increases the value
ARROW DOWN   decreases the value
F stores the value and leaves the set phase

DECIMAL DIGITS SETTING

When the display shows n.dEC (number of decimal digits) press the key *ARROW DOWN* sequentially to scroll 0, 1, 2, 3 decimal digit. Press the key *F* to store the choice.

INPUT PULSES DOUBLING

When the display shows du.no press the key *ARROW DOWN* to modify the selection.

Possible selections:

du.no. input pulses direct reading
du.si. input pulses doubled reading

TIME BASE CALCULATION

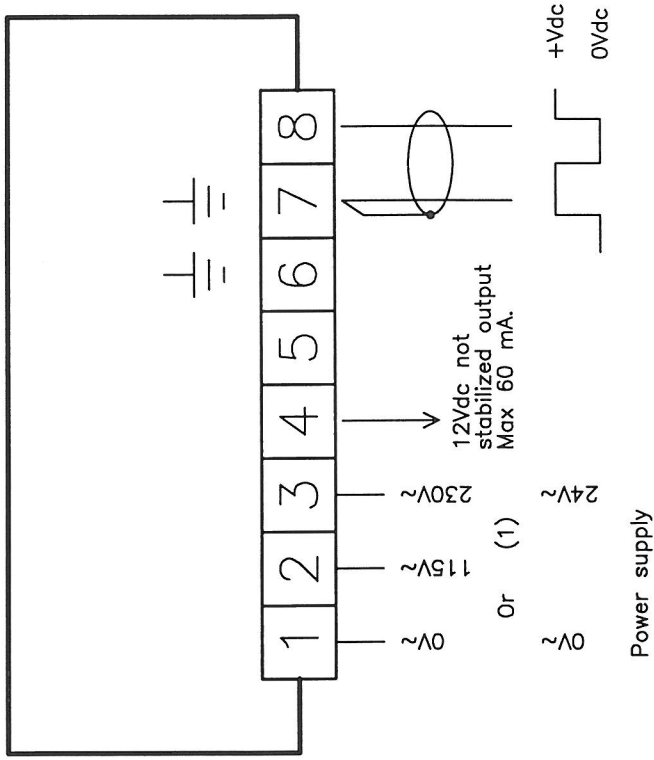Revolutions/minute indication

$$T.B. = 60 / pulses\_no.*m$$

Metres/minute indication

$$T.B. = (60*Devel) / pulses\_no.*m$$

Where:

T.B.	= time base expressed in seconds
pulses_no.	= encoder pulses/rev. no.
Devel.	= wheel development in metres
m	= input pulses multiplying factor
	(**du.no.** m=1, **du.si.** m=2)

8 7 6 5 4 3 2 1

12Vdc not
stabilized output
Max 60 mA.

230V~
115V~
0V~

Or (1)

24V~
0V~

Power supply

+Vdc
0Vdc

(1) See the instrument label

DISEGNO N.	CODICE		SCALA	FOGLIO	SOSTITUTO DA	DATA	FIRMA	DISEGNATO	DATA	SOFTWARE
C2645				1 di 1				T.R.	6.7.05	
DENOMINAZIONE			TOLL.	MATER.	SOSTITUISCE	DATA	FIRMA	VISTO	FILE	
VD4									C2645.DWG	
External connection				DESCRIZIONE		DATA	FIRMA			
NOTE	Version F									
CLIENTE										

MODIFICHE

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