en de fr es cs

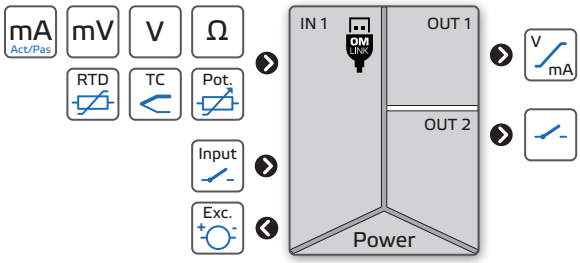
OMX 333iUNI

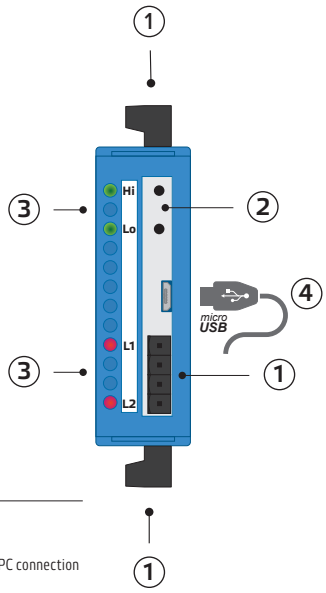
Digital DIN rail mounted signal convertor

MULTIFUNTION INPUT (DC, PM, RTD, T/C, DU)

1 Description

- Multifunction input (DC, PM, RTD, T/C, DU)
- Configurable type and measuring range
- Analogue output, Relay/Transistor Outputs
- Excitation 24 V
- Quick configuration by DIP switch
- PC configurable via USB port
- Galvanic isolation 2.5 kVAC
- Simple instalation to DIN rail





Legend

① Connectors
② Control button
③ RGB Status LED
④ microUSB port for PC connection

LED Indication

Hi	Lo	L1	L2	Status
●				Device is running
✱				Device functionality is limited, powered via USB
✱				This device has a Delayed Start option
●				Error: device is out of order
●	○			Tare function is activated
●	●			Error: of input (> ±110% of range) or of sensor [ERR.1-5]
●	●			Error: AO loop open [ERR.10]
●	●			Error: setting / calibration [ERR.34-36]
✱	✱			Serious error (Safe mode) [ERR.50]
✱	✱			Button function is blocked
●	●			Simulation mode is activated
●		●	●	Relays is activ
●		✱	✱	Relays is blocked - hyster./time
●		✱	✱	Opening of the relay below the set limit is blocked (LATCH mode)

⚠ DANGER ⚠

HAZARD OF ELECTRICAL SHOCK
- Disconnect all power and other supply lines before servicing equipment

Failure to follow this instruction may result in death or serious injury.

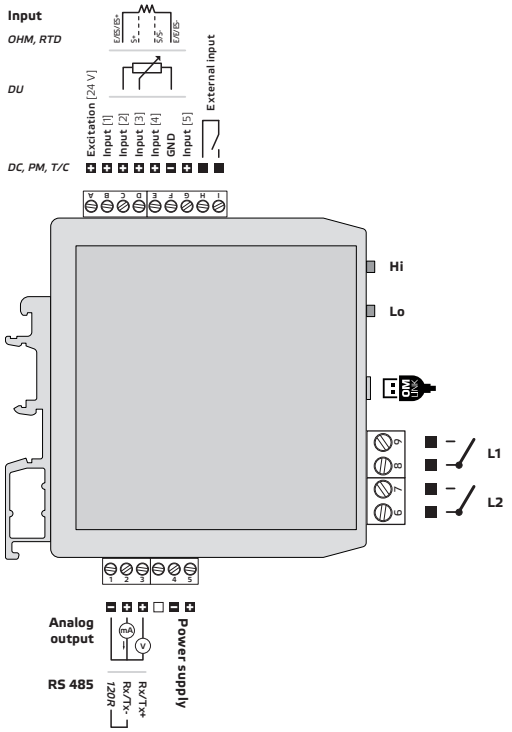
⚠ WARNING ⚠

EQUIPMENT OPERATION HAZARD
- Do not use this product in safety critical system
- Do not disassemble, repair or modify this product
- Do not operate beyond the recommended operating environment

Failure to follow these instructions may result in death, serious injury, or equipment damage.

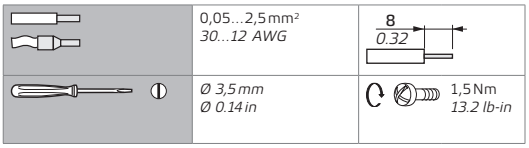
Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.
No responsibility is assumed by ORBIT MERRET for any consequences arising out of the use of this device.

2 Connection



Connection

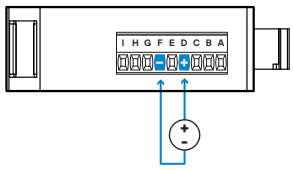
Type	Input 3	Input 1	Input 5
DC	±60 / ±75 / ±100 / ± 150 mV ±300 / ± 1000 mV	±20 / ±40 V	±100 mA
PM		±2 / ±5 / ±10 V	0...5/20 mA, 4...20 mA
OHM	0...0,1 / 0,3 / 1 / 3 / 10 / 30 / 100 / 300 kΩ		
Pt	Pt 50 / 100 / 500 / 1000		
Cu	Cu 50 / 100		
Ni	Ni 1000 / 10000		
NTC	NTC 2/2,2/10/12/20 kΩ		
PTC	KTY 81		
T/C	J/K/T/E/B/S/ R/N/L		
DU	Potentiometer > 500 Ω		



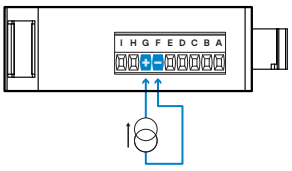
Note
Contactors, high power electric motors, frequency drives and other power devices should not be in a close proximity of the meter. Input signal leads (measured value) should be seperated from all power lines and power devices. Even though the device has been designed and tested according to standards for industrial environment, we strongly advise to adhere to the above presented rules.

Input wiring diagram for type DC and DU

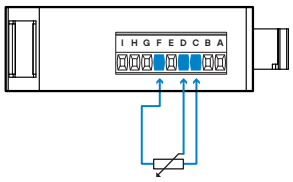
Voltage [mV]



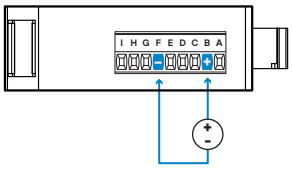
Current [mA]



Potentiometer



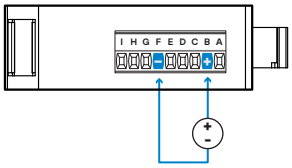
Voltage [V]



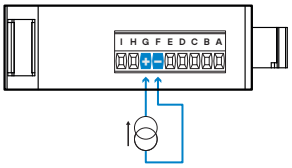
Range		DC
0...60/75/100/150/300/1000 mV ±60/±75 mV ±100/150/300/1000 mV	Input 3	D
0...20/±40 V ±20/±40 V	Input 1	B
0...100 mA ±100 mA	Input 5	G

Input wiring diagram for type PM

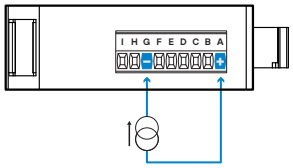
Voltage [V]



Current [mA], passive



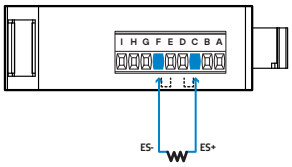
4-20 [mA], active



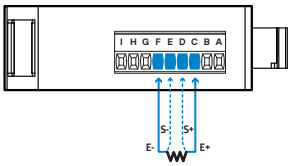
Range		PM
Passive 0...5/20 mA ±5/±20 mA 4...20 mA	Input 5	G
Active 4...20 mA	Input 5	G
0...2/5/10 V ±2/±5/±10 V	Input 1	B

Input wiring diagram for type OHM, Pt, Ni, Cu, PTC, NTC and TC

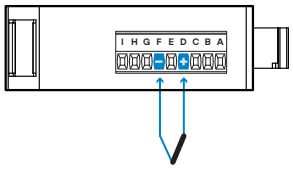
2-wire



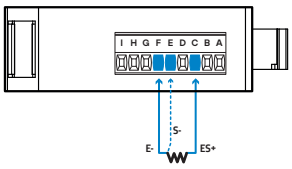
4-wire



Thermocouple



3-wire



Range		T/C
J/K/T/E/B/S/R/N/L/XK	Input 3	D

In case 2-wire connection is used either for RTD or for OHM measurement, it is absolutely essential to interconnect the unconnected terminals (7+8 / 9+11)

3 Device setting

DIP switch

For a quick set up you can use the DIP switch

1	2	3	4	5	Input - type	1	2	3	4	5	Inpit - type	1	2	3	4	5	Input - type
					Setting via OM Link	●	●		●		Pt100/3920 ppm, 2/4 w [US]		●		●		NTC 10k/3435, 2/4 w
●					Voltage [V]			●	●		Pt100/3920 ppm, 3 w [US]		●	●		●	NTC 10k/3435, 3 w
●	●				Current [mA]	●		●	●		Pt100/3910 ppm, 2/4 w [RU]	●	●	●		●	NTC 20k/4263, 2/4 w
							●	●	●		Pt100/3910 ppm, 3 w [RU]				●	●	NTC 20k/4263, 3 w
●		●			Volatge [mV]	●	●	●	●		Pt1000/3850 ppm, 2/4 w [EU]	●			●	●	Thermocouple - B
	●	●			Resistance 2/4 w					●	Pt1000/3850 ppm, 3 w [EU]		●		●	●	Thermocouple - E
●	●	●			Resistance 3 w	●				●	Ni1000/5000, 2/4 w	●	●		●	●	Thermocouple - J
				●	Potentiometer		●			●	Ni1000/5000, 3 w			●	●	●	Thermocouple - K
●			●		Pt100/3850 ppm, 2/4 w [EU]	●	●			●	Ni1000/6180, 2/4 w	●		●	●	●	Thermocouple - R
	●		●		Pt100/3850 ppm, 3 w [EU]			●		●	Ni1000/6180, 3 w		●	●	●	●	Thermocouple - S
												●	●	●	●	●	Thermocouple - T

6	7	8	Input - Range						
			Volage [V]	Volage [mV]	Current	Resistance	Pt/Ni	T/C	NTC/PTC
			0...5 V	0...60 mV	0...5 mA	100 Ω	0°...100°C	0°...100°C	0°...50°C
●			0...10 V	0...150 mV	0...20 mA	300 Ω	0°...200°C	0°...200°C	0°...100°C
	●		0...20 V	0...1000 mV	4...20 mA	1 kΩ	0°...300°C	0°...500°C	0°...200°C
●	●		0...40 V	±60 mV	5...0 mA	3 kΩ	0°...400°C	0°...800°C	-50°...50°C
		●	5...0 V	±150 mV	20...0 mA	10 kΩ	0°...500°C	0°...1000°C	-50°...100°C
●		●	10...0 V	±1000 mV	20...4 mA	30 kΩ	0°...800°C	-100°...100°C	
	●	●	±5 V		±5 mA	100 kΩ	0°...1000°C	-100°...200°C	
●	●	●	±10 V		±20 mA	300 kΩ	-50°...100°C	-100°...300°C	

9	10	11	Output - range
			0...2 V
●			0...5 V
	●		0...10 V
●	●		±10 V
		●	0...5 mA
●		●	0...20 mA
	●	●	4...20 mA
●	●	●	Er. 4...20 mA

Analogue input range setting, TEACH-IN

1. by a short press of the **Lo** button enter the configuration mode - LED **Hi** yellow and LED **Lo** turquoise
2. connect the signal of the desired value for the minimum of the range **RNG.MIN** (for example 5 mA)
3. by a long press (>2s) of the **Lo** button this value is se - LED **Hi** yellow, LED **Lo** purple
4. connect the signal of the desired value for the maximum of the range **RNG.MAX**. (for example 19,5 mA)
5. by a long press (>2s) of the **Lo** button this value is set - LED **Hi** yellow, LED **Lo** green
6. by a short press of the **Lo** button return to the standard working mode - LED **Hi** green

Setting of **Analogue input TEACH-IN** is active only when DIP switches No. 1-5 are in the "0" position, i.o. **Setting via OM Link**

Tare settings

1. by a short press of the **Hi** button enter configuration of Tare - LED **Hi** white and LED **Lo** turquoise
2. by a long press (>2s) of the **Hi** button set the current value of Tare - LED **Hi** white, LED **Lo** green
3. by a short press of the **Hi** button return to the standard working mode with active Tare - LED **Hi** green, LED **Lo** white

Minimum range of **Analog output** for U/I inputs signals is pre-set as unipolar,
i.e. "0 V/mA" or "4 mA".
If required, it is also possible to enter a negative value of the maximum in the minimum, i.e. zero will be in the middle of the selected range.

A short press at any time during the calibration will end the calibration without saving.After one minute of inactivity, the calibration is terminated without saving and both LEDs return to the basic state

4 Configuration from PC using OM Link SW

Input

Reset of internal values	CLEAR	CL. TAR. / CL. M.M. / CL. LEA.	Tare resetting, 2-wire line resistance resetting, Resetting min/max value
Sampling rate	READ. S.	1 / 2 / 5 / 10 / 20 / 50 / 100 / 200 / 400	Measuring rate selection
Type of measurement	TYPE	DC / PM / OHM / TEMPER. / LIN.POT.	Measuring type selection
Measuring range	M.RANGE	60mV / 75mV / 100mV / 150mV / 300mV / 1000mV / 20V / 40V / 100mA	Measuring range selection (Type of measurement - DC)
	M.RANGE	2V / 5V / 10V / 0-5mA / 0-20mA / 4-20mA	Measuring range selection (Type of measurement - PM)
	M.RANGE	100 / 300 / 1 k / 3 k / 10 k / 30 k / 100 k / 300 k	Measuring range selection (Type of measurement - OHM)
	M.RANGE	0-100%	Measuring range selection (Type of measurement - Potenciometr)
Preset tare	P. TARE	-99999...0...99999	Setting of fixed tare
Temperature sensor	SENSOR	Pt / Ni / Cu / NTC / PTC / T/C	Temperature sensor selection (Type of measurement - Temperature)
Temperature sensor type	TM.TYPE	EU 100 / EU 500 / EU 1k / US 100 / RU 50 / RU 100	Temperature sensor selection (Temperature sensor - Pt)
	TM.TYPE	5.0 1k / 6.2 1k / 5.0 10k / 6.2 10k	Temperature sensor selection (Temperature sensor - Ni)
	TM.TYPE	4.26 50 / 4.28 50 / 4.26 k1 / 4.28 k1	Temperature sensor selection (Temperature sensor - Cu)
	TM.TYPE	NTC 1 / NTC 2 / NTC 3 / NTC 4 / NTC 5 / NTC 6	Temperature sensor selection (Temperature sensor - NTC)
	TM.TYPE	KTY81	Temperature sensor selection (Temperature sensor - PTC)
	TM.TYPE	B / E / J / K / L / N / R / S / T / XK	Temperature sensor selection (Temperature sensor - T/C)
Connection	CONN.	2-WIRE / 3-WIRE / 4-WIRE	
	CONN.	1TC-IN / 2TC-IN / 1TC-EX / 2TC-EX	Cold junction compensation, (Temperature - T/C)
Temperature unit	T. UNIT.	°C / °F	Temperature
Cold junction compensatio	CJC	0...99.9 °C	Temperature (T/C)
Input offset	R. ADD.	0...99.9 Ohm	OHM, Temperature (Pt, Ni, Cu, NTC, PTC)
2-wire leads resist.compens.	LEADS.	YES	Short circuit the cable wires on the sensor side and select „YES" (OHM, RTD)
Setting of converted value	RNG.MIN.	-99999...4...999999	For the minimum of the selected input range
	RNG.MAX.	-99999...20...999999	For the maximum of the selected input range
Input setting Expert	TEACH-IN	T-IN.LO / T-IN.HI	Setting the input range in the Teach-in mode
	MANUAL	MAN. LO / MAN. HI	Setting the input range in the Manual mode
Digital filters	F. MODE.	OFF / AVERAG. / FL. AVG. / EXPON. / ROUND.	Filters for math. adjust. of the input signal
Filter constant	F.CONST.	0...9999	Setting the constant for the filter
External input	FUNCT.	OFF / TARE / CL.TARE / CL. M.M. / CL. REL. / HOLD / SAMPLE / HLD.MIN / HLD.MAX / HLD.MM / KEY.LCK.	Selection of functions controlled by ext. input

1TC-IN 1x T/C, internal compensation
2TC-IN 2x T/C, internal compensation
1TC-EX 1x T/C, external compensation
2TC-EX 2x T/C, external compensation

T-IN.LO Device measures the value of the Lo signal
YES Lo signal connection confirmed
T-IN.HI Device measures the value of the Hi signal
YES Hi signal connection confirmed

MAN. LO Manual entry of Lo input signal for MIN
4.02 Entry of signal value (example: 4.02 mA)
MAN. HI Manual entry of Hi input signal for MAX)
19.97 Entry of signal value (example: 19.97 mA)

Function

Mathematical function	INP. M.F.	OFF / INPUT / FILTER.	Input selection for the math function
	TYPE.M.F.	POLYN. / IN. POL. / LOGAR. / EXPON. / POWER. / SQ.ROOT	
	CONST. A ... F	0...99	Setting constants for mathematical functions
Linearization table	INP. L.T.	OFF / INPUT / FILTER.	Input selection for the linearization table
	N.OF.PTS.	5...100	Number of points in the table
	VALUES	-9999...99999	Values of X/Y

POLYN. Polynomial $Ax^3+Bx^4+Cx^3+Dx^2+Ex+F$
IN. POL. Inv. polynomial $\frac{A}{x^3}+\frac{B}{x^4}+\frac{C}{x^3}+\frac{D}{x^2}+\frac{E}{x}+F$
LOGAR. Logarithmic $A\cdot\ln\left(\frac{Bx+C}{Dx+E}\right)+F$
EXPON. Exponential $A\times e^{\left(\frac{Bx+C}{Dx+E}\right)}+F$
POWER Power $A\times(Bx+C)^{(Dx+E)}+F$
SQ.ROOT Square root $A\times\sqrt{\frac{Bx+C}{Dx+E}}+F$

Outputs

Analog output	INP. A.O.	INPUT / FILTER. / MIN.INP. / MAX.INP. / MAT.FNC. / LIN.TAB.	Selection of input for analogue output
	A.O.TYPE	0-2 V / 0-5 V / 0-10 V / ±10 V / 0-5 mA / 0-20 mA / 4-20 mA / ER.4-20	Selection of range for analogue output
	A.O. MIN.	-99999...4...99999	Assigning the value of the input to the lower end of the range of AO
Relays/OC 1/2	A.O. MAX.	-99999...20...99999	Assigning the value of the input to the upper end of the range of AO
	INP.REL.	OFF / INPUT / FILTER. / MIN.INP. / MAX.INP. / MAT.FNC. / LIN.TAB. / ERROR	Selection of input for relays/OC
	MOD.REL.	RISE / DROP / WINDOW / BATCH	Selection of limit type
	TYP.REL.	SW. ON / SW. OFF / PULSE / LATCH	Selection of output type
	LIMIT	-99999...0...999999	Setting of switch-on value)
	HYSTER.	0...999999	Setting of hysteresis
	WIN.STR.	-99999...0...999999	Setting of "From" value of a window limit
	WIN.STP.	-99999...0...999999	Setting of "To" value of a window limit
	DELAY.	STR.DLY. / STP.DLY. > 0...999999	Setting of output On/Off delay [s] - Value, Window
	PERIOD.	0...99999.9	Switching period - Batch
	DURAT.	0...99999.9	Duration of switch-on [s] - Batch

ER.4-20 with error indication (< 3.2 mA)

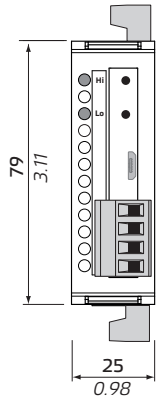
Service

Setting of password	PASSW.	0...9999	Password to connect the device to PC. If it is set to "0", access is not blocked
Delayed Start	DLY.STR.	0...99	Setting the time [sec.] - when the measurement is not performed after powering the device on
Save user settings	SAV.SET.	YES	Saves the current device settings
Load user settings	LOA.SET.	YES	Loads the user settings into the device
Factory reset	FACT.ST.	YES	Loads the original factory settings, restores the initial settings (BLUE TEXTS)
Erase user calibration	CLR.CAL.	YES	Clears user calibration, restores factory calibrations (after user calibration by script via OM Link SW had been performed)
Key lock	KEY.LCK.	ON / OFF	Disables the push button(s) on the front panel of the device
Error selection for signalling	SIG.ERR.	ERR 1 / ERR 3 / ERR 10 / ERR 20 / ...	Errors that will be signalled on the selected output
Simulation of input signal	SIM.MIN.	MIN / MAX > -99999...0...999999	Setting the range for the input signal simulation
	STEP	-99999...1...999999	Setting of increment/step value
	TIME	0...100...999.9	Setting the increment/step duration time [sec.]
	START	START / STOP > YES	Start/Start of simulation

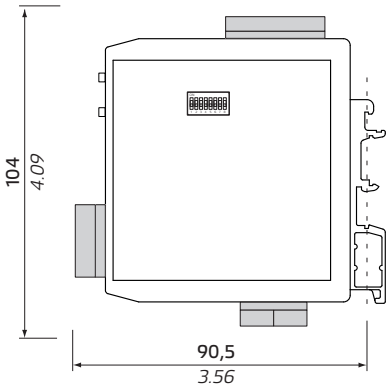
The USB connector is galvanically connected to the input! USB-to-USB Isolator must be used when input signal is connected to the device.
DANGER OF COMPUTER DAMAGE

5 Instrument dimensions and installation

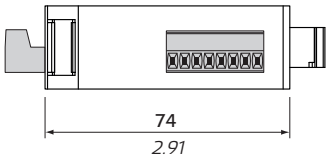
Front view



Side view



Top view



mm / inch

Installation to DIN rail of 35 mm width

6 Technical data

INPUT

No. of inputs	1		
Setting	24-bit ΔΣ ADC with PGA The range is selectable either by DIP switch or by OM Link free SW from PC		
DC Range	±60 mV	> 10 MΩ	Input 3
	±75 mV	> 10 MΩ	Input 3
	±100 mV	> 10 MΩ	Input 3
	±150 mV	> 10 MΩ	Input 3
	±300 mV	> 10 MΩ	Input 3
	±1000 mV	> 10 MΩ	Input 3
	±20 V	1 MΩ	Input 1
	±40 V	1 MΩ	Input 1
	±100 mA	< 200 mV	Input 5
PM Range	±5 mA	< 200 mV	Input 5
	±20 mA	< 200 mV	Input 5
	4...20 mA	< 200 mV	Input 5
	±2 V	1 MΩ	Input 1
	±5 V	1 MΩ	Input 1
	±10 V	1 MΩ	Input 1
OHM Range	0...100 / 300 Ω 0...1 / 3 / 10 / 30 /100 kΩ 0...300 kΩ (only 2- and 4-wire)		
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
RTD Range	Pt 100/500/1 000, 3 851 ppm/°C		-50°...450°C
	Pt 100, 3 920 ppm/°C		-50°...450°C
	Pt 50, 3 910 ppm/°C		-200°...1100°C
	Pt 100, 3 910 ppm/°C		-200°...450°C
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
Ni Range	Ni 1 000/10 000, 5 000 ppm/°C		-50°...250°C
	Ni 1 000/10 000, 6 180 ppm/°C		-200°...250°C
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
Cu Range	Cu 50/100, 4 260 ppm/°C		-50°...200°C
	Cu 50/100, 4 280 ppm/°C		-200°...200°C
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
NTC Range	NTC 1	2k2, $B_{25/85}$ = 3600	-40°...125°C
	NTC 2	2k0, $B_{25/85}$ = 3528	-40°...125°C
	NTC 3	10k, $B_{25/85}$ = 3435	-40°...125°C
	NTC 4	10k, $B_{25/85}$ = 3977	-40°...125°C
	NTC 5	12k, $B_{25/85}$ = 3740	-40°...125°C
	NTC 6	20k, $B_{25/85}$ = 4263	-40°...125°C
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
PTC Range	KTY 81/210		-55°...150°C
Connection	2-, 3- and 4-wire with broken cable/sensor detection		
T/C Range	J (Fe-CuNi)		-200°...900°C
	K (NiCr-Ni)		-200°...1 300°C
	T (Cu-CuNi)		-200°...400°C
	E (NiCr-CuNi)		-200°...690°C
	B (PtRh30-PtRh6)		300°...1 820°C
	S (PtRh10-Pt)		-50°...1 760°C
	R (Pt13Rh-Pt)		-50°...1 740°C
	N (Omegalloy)		-200°...1 300°C
	L (Fe-CuNi)		-200°...900°C
	XK (Chromel-Copel)		-200°...800°C
	with broken cable/sensor detection		
CJC	adjustable -20°...99°C or automatical		
DU Power	1.65 VDC/3 mA, potentiometer resistance > 500 Ω		

EXTERNAL INPUT

No. of inputs	1, on contact	
Function	OFF	No function assigned
	TARE	Activation of Tare
	CL.TAR.	Reset of Tare
	CL.M.M.	Reset of Min./Max. values
	CL.REL.	Open relay/OC (Type LATCH)
	HOLD	Measurement paused
	SAMPLE	Take a one-off measurement
	HLD.MIN	Value of minimum *
	HLD.MAX	Value of maximum *
	HLD.M-M	Value of MAX-MIN*
	KEY.LCK.	Device buttons blocked

*The value is calculated from the period starting with the previous external input activation

INSTRUMENT SPECIFICATION

TC	50 ppm/°C
Accuracy	±0.07 % of FS ±0.05 % of FS DC, PM ±0.1 % of FS OHM - 100k/300k *the specified accuracy applies to 20 measurements/s*
Rate	1...400 measurements/s *speed of 400 meas./s is with FFT signal filtering*
Overload	10x (t < 30 ms), 2x
Compensation of conduct	max. 30 Ω (RTD)
Measurement accuracy CJC	±1.5°C (T/C)
Functions	Teach-in, Tare, Math. functions, Simulation
Digital filters	exponential / floating / arithmetic average, rouding
Math functions	polynomial / inverse polynomial / logarithm / exponential / power / root
Linearization	linear interpolation in 100 points (only via OM Link)
OM Link	company communication interface for operation, setting and update of instruments. (microUSB)
Watch-dog	reset after 500 ms
Calibration	at 25°C and 40 % r.h.

ANALOG OUTPUT

No. of outputs	1
Type	isolated, adjustable with 16-bit DAC, output type and range is selectable
TC	15 ppm/°C
Non-linearity	0.1 % of FS
Accuracy	±0.02 % of FS
Rate	response to change of value < 0.2 ms
Ranges	0...2 / 5 / 10 V, ±10 V, resistive load < 2.6 kΩ 0...5 / 20 mA/4...20 mA, comp. < 600 Ω /12 V Indication of broken current loop Indication of error message (output < 3.2 mA)

RELAYS / OC OUTPUT

No. of outputs	2	
Type	digital, configurable in menu	
Mode	RISE	Active above value
	DROP	Active below value
	WINDOW	Beginning, End, Hysteresis, Delay
	BATCH	Period, Duration
	Error	Error selection for signalling (SIG.ERR.)
Function Relays/OC	SW. ON	is closed in active mode
	SW. OFF	is open in active mode
	PULSE	switches on once in active mode
	LATCH	in active mode is On until acknowl-edgement is made by external input *(IEC EN 61496)*
Limits	-99999...999999	
Hysteresis	0...999999	
Delay	0...999.9 s	
Outputs	2x relays with switch-on contact (Form A) (250 VAC / 30 VDC, 3 A)* 2x open collector (30 VDC/100 mA)	
Relays	1/8 HP 277 VAC, 1/10 HP 125 V,ilot Duty D300 ** values apply for resistance load*	

EXCITATION

Fixed voltage	24 VDC/< 60 mA, isolated

POWER SUPPLY

Power	10...30 VDC/24 VAC, ±10 %, 2.5 VA, PF ≥ 0.4, I_{STP} < 40 A/1 ms, isolated *Fuse inside (T500mA)*

MECHANIC PROPERTIES

Material	PA66, incombustible UL 94 V-0, green
Dimensions	25 x 79 x 90.5 mm (w x h x d)
Installation	to DIN rail 35 mm wide

OPERATING CONDITIONS

Connection	connector terminal blocks, section < 1.5/2.5 mm²
Stabilization period	within 5 minutes after switch-on
Working temp.	-20°...60°C
Storage temp.	-20°...85°C
Working humidity	< 95 % r.h., non condensing
Protection	IP20
Construction	safety class I
El. safety	EN 61010-1, A2
Dielectric strength	2.5 kVAC for 1 min. between power supply and signal input 2.5 kVAC for 1 min. between signal input and outputs 4 kVAC for 1 min. between signal input and relays
Insulation resistance*	for pollution degree II, measurement cat. III power supply > 300 V (PI), 255 V (DI) Input/outputs > 300 V (PI)
EMC	EN 61326-1 (Industrial area)
RoHS	EN IEC 63000 : 2018
Seismic qualification	IEC/IEEE 60980-344 Edition 1.0, 2020, par. 6, 9
Mechanical resistance	EN 60068-2-6 ed. 2:2008

* PI - Primary insulation, DI - Double insulation

Error messages

Error	Error description	Solution
ERR 1	Input range exceeded by ±10% or more.	Change input signal value or input setting (range).
ERR 2	AD converter overflow / underflow.	Change input signal value or input setting (range).
ERR 3	Sensor wire broken.	Check sensor cable and connection.
ERR 4	Wire to thermocouple is broken.	Check sensor cable and connection.
ERR 5	4-20 mA input current loop broken	Check cable and current loop connection.
ERR 10	Output current loop broken.	Check cable and current loop connection.
ERR 20	Math function error.	Change math function settings.
ERR 21	Linearization table error.	Change/complete the settings of the linearization table.
ERR 30	Powered only by USB, analog circuits inactive.	Connect power supply to the device (clamp 1,2).
ERR 34	Default configuration not successfully set.	Repeat device configuration. If message is shown repeatedly, send the device for repair.
ERR 35	Factory default calibration not successfully set.	When this error occurs, send the device for re-calibration or upload factory calibration data.
ERR 36	Default user calibration not successfully set.	Repeat the user calibration. If message is shown repeatedly, send the device for repair.
ERR 50	Serious device error - damaged EEPROM. The device operates in an emergency mode, i.e. settings cannot be changed. Measurement error can be up to 5%	Send the device for repair.
ERR 56	Internal CJC temperature measurement error.	Send the device for repair.

Errors ERR 34-56 are displayed permanently, until they are corrected.

Measuring instruments of the OMX 333iUNI series conform to the European regulation 2014/30/EU, 2014/35/EU and 2011/65/EU, 2015/863/EU.

This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations.
As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.

ORBIT MERRET, spol. s r.o.
Vodňanská 675/30
198 00 Praha 9
Czech Republic
+420 - 281 040 200 orbit@merret.eu