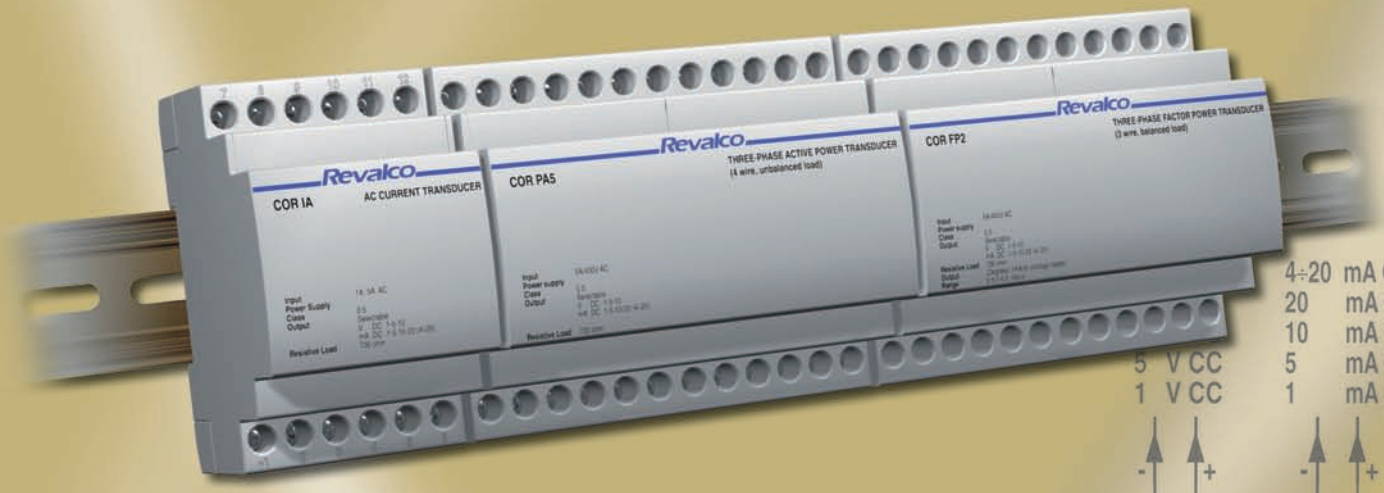
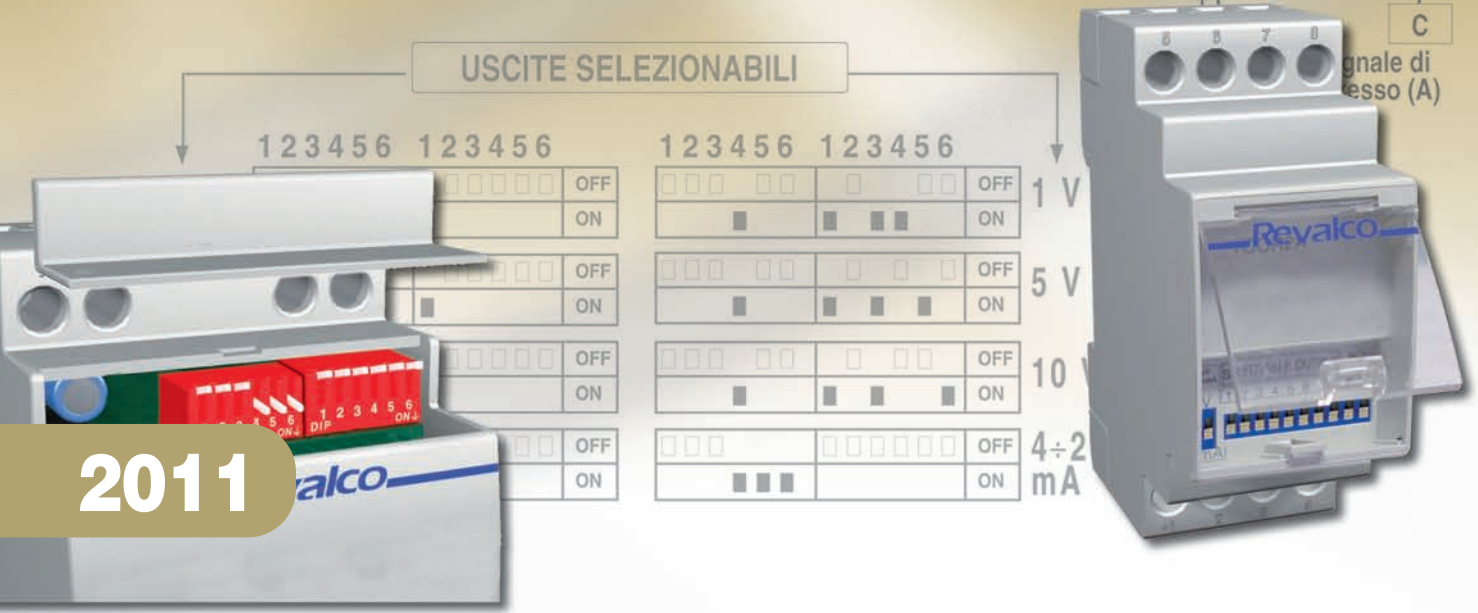
Revalco®

Made in Italy

measurement transducers





2011

MEASUREMENT TRANSDUCERS

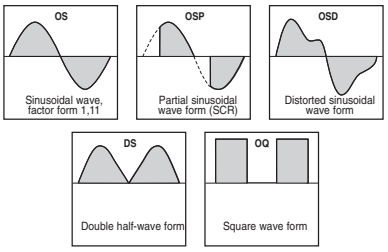
GENERAL DESCRIPTION

- The transducer is a device that measures a given electrical parameter, which is then through electronic circuitry, converted to a DC signal, which is directly proportional to the input, to allow remote indication without loss of accuracy.
- The Revalco range of transducers, having galvanic separation between Input and Output, has been developed to a high specification giving the user, confidence with the Accuracy and Linearity over a wide range of measured parameters. Having Low Power Consumption while being unaffected by any changes in Temperature, Vibration or Load, ensures this range is suitable for many applications in the Power Monitoring and Distribution fields.
- Revalco transducers have been designed with the ever changing needs of the market in mind. Each item has incorporated the ability to select any of the recognised outputs of both DC mA and DC V by simple selection of minidip keys located under a removable section of the upper case wall
- Standards: EN61010-1; EN60688; EN61000-6-4; EN61000-6-2

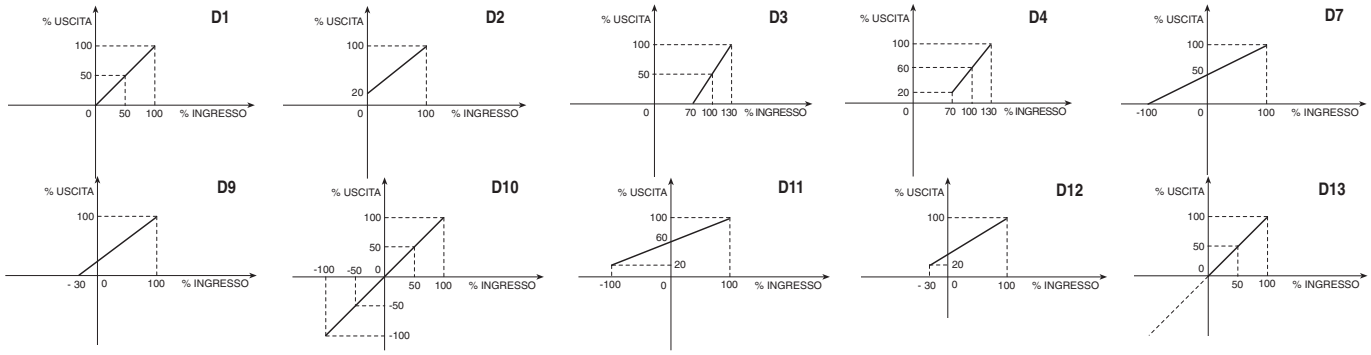
ORDERING DATA

- The three phase active and reactive power transducers are calibrated with the following standard values:
  Current input 5A and the primary values are selectable by minidips
  Voltage input 400V
- On request it is possible to calibrate the transducers with the following parameters which must be indicated when ordering:
  Current input 1A
  Voltage input: 100/√3/V, 110/√3V, 100V, 110V, 230V, 440V, 500V
- When ordering, the end scale value must be indicated

WAVEFORM

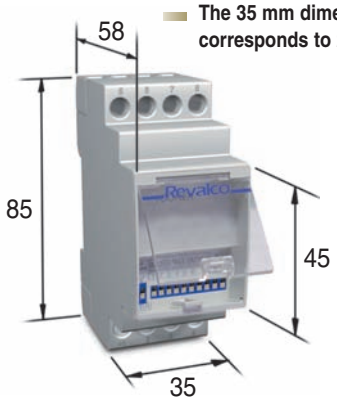


LINEARITY DIAGRAMS BETWEEN INPUTS AND OUTPUTS

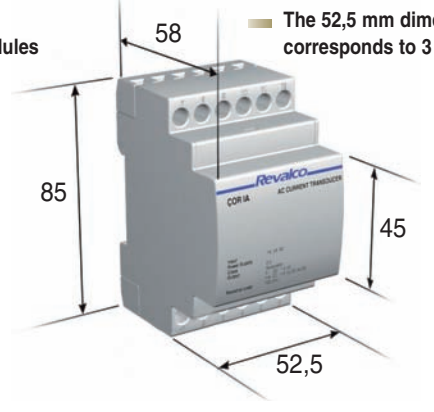


DIMENSIONS in mm

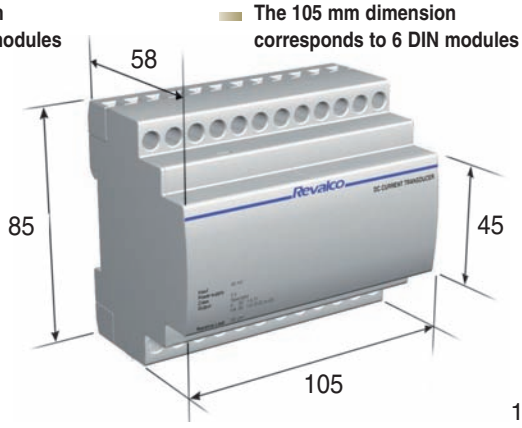
- The 35 mm dimension corresponds to 2 DIN modules



- The 52,5 mm dimension corresponds to 3 DIN modules



- The 105 mm dimension corresponds to 6 DIN modules



MEASUREMENT TRANSDUCERS - TRUE RMS

SINGLE PHASE

- Auxiliary power supply: see table
- Input nominal values: see table
- Response time ≤ 300 ms
- Dimensions: 2 DIN modules
- Resistive load: 700Ω
- Selectable output nominal values 1-5-10VDC and 1-5-10-20-4/20mADC ±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mA DC
- Class 0,5
- Transparent sealable front cover

NEW

		1COR2A...	1COR2V...	1COR2F...	1COR2P...	1COR2C...
Current transducers	230	•				
Voltage transducers	230		•			
Frequency transducers	230			•		
Single phase active power transducers	230				•	
DC line power transducers	230					•
Sole power supply 24VAC	24	•	•	•	•	•
Sole power supply 110VAC	110	•	•	•	•	•
Sole power supply 22...36VAC and 19...70VDC	-P1	•	•	•	•	•
Sole power supply 44...130VAC and 70...240VDC	-P2	•	•	•	•	•

CODES TABLE

2 DIN modules transducers identification		measuring unit	power supply		input		
1	C O R 2	A	2 3 0	-	1	A	C

230 = 230VAC
-24 = 24VAC
110 = 110VAC
-P1 = 22...36VAC and 19...70VDC
-P2 = 44...130VAC and 70...240VDC

A = current
V = voltage
F = frequency
P = active power
C = DC line power

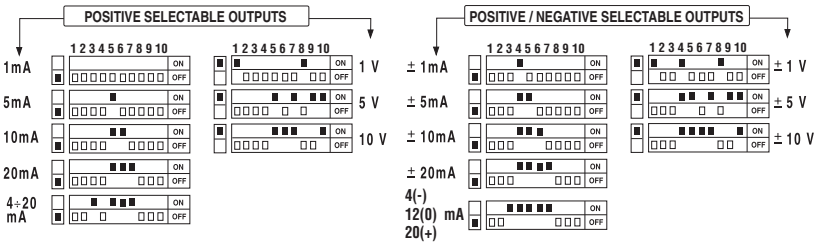
-1AC = input 1A AC (internal CT measurement)
-5AC = input 5A AC (internal CT measurement)
-5DC = input 5A DC
-10DC = input 10A DC
-60MV = input 60mV DC (or -100MV / -150MV / -300MV)

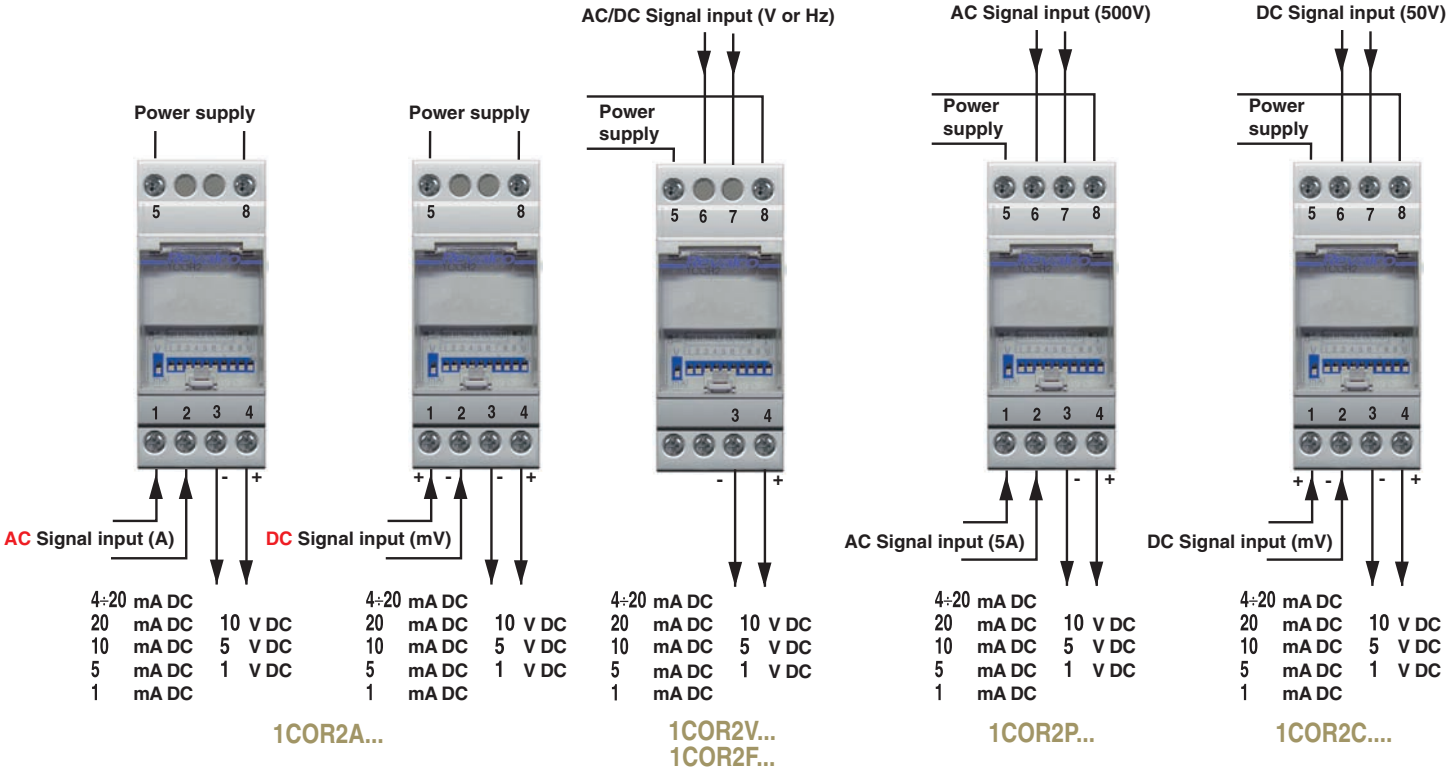
-500V = input 500V AC or DC
-100V = input 100V AC or DC
-110V = input 110V AC or DC
-150V = input 150V AC or DC
-250V = input 250V AC or DC
100R3V = input 100V:√3 AC or DC
110R3V = input 110V:√3 AC or DC

-4555HZ = input 45/55 Hz
-4565HZ = input 45/65 Hz

-5A500V = calibration 5A 500V AC (internal CT measurement)

-5A50V = calibration 5A 50V DC (voltage/current measure has a common point)





1COR2A... 1COR2V... 1COR2F... 1COR2P... 1COR2C....

MEASUREMENT TRANSDUCERS

CURRENT TRANSDUCERS

SELF SUPPLIED

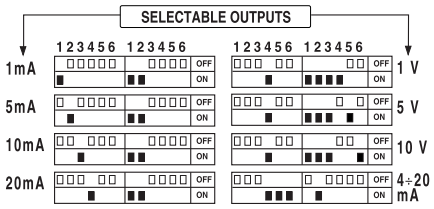
	1CORIAA5 20	1CORIAA1 20	1CORIAA5 10	1CORIAA1 10
- NOMINAL INPUT VALUES	5A	1A	5A	1A
- NOMINAL OUTPUT VALUES	20 mA CC	20 mA CC	10 V CC	10 V CC
- RESISTIVE LOAD	300Ω	300Ω	>10kΩ	>10kΩ
- MEASURING RANGE	0 ÷ In			
- ACCURACY CLASS	1			
- OVERLOAD	**Permanent:** 1,2 In **Instantaneous:** 10 In for 1 sec.			
- RESPONSE TIME	≤ 300 ms			
- ALTERNATED RESIDUAL	≤ 2%			
- OPERATING FREQUENCY	50/60 Hz			
- BURDEN	3 VA			
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	2kV for 1min at 50Hz			
- OPERATING TEMPERATURE	0 °C ÷ +55 °C			
- INPUT WAVE FORM	OS			
- DIMENSIONS / WEIGHT kg.	2 DIN modules / 0,25			
- Different technical characteristic can be considered, under specific requests				

EXTERNAL POWER SUPPLY

- AUXILIARY SUPPLY (separate)	230V AC standard
- NOMINAL INPUT VALUES	1A and 5A present on the same transducer
- NOMINAL OUTPUT VALUES (selectable)	1 - 5 - 10 VDC and 1 - 5 - 10 - 20 - 4/20 mA DC
- RESISTIVE LOAD	700Ω
- MEASURING RANGE	0 ÷ In
- ACCURACY CLASS	0,5
- OVERLOAD	**Permanent:** 2 In **Instantaneous:** 10 In for 1 sec.
- RESPONSE TIME	≤ 300 ms
- ALTERNATED RESIDUAL	≤ 1%
- OPERATING FREQUENCY	50/60 Hz
- BURDEN	current circuit: ≤ 0,8 VA - power supply: ≤ 4VA
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	
• insulation between inputs, outputs, power supply	2kV for 1min at 50Hz
• insulation between the all circuits and earth	4kV for 1min at 50Hz
- OPERATING TEMPERATURE	0 °C ÷ +55 °C
- INPUT WAVE FORM	OS
- DIMENSIONS / WEIGHT Kg.	6 DIN modules (3 DIN modules) / 0,54 (0,27)
- Different technical characteristic can be considered, under specific requests	

DC CURRENT - 1CORIC

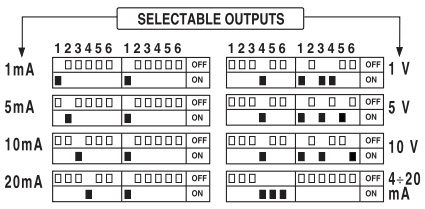
The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:



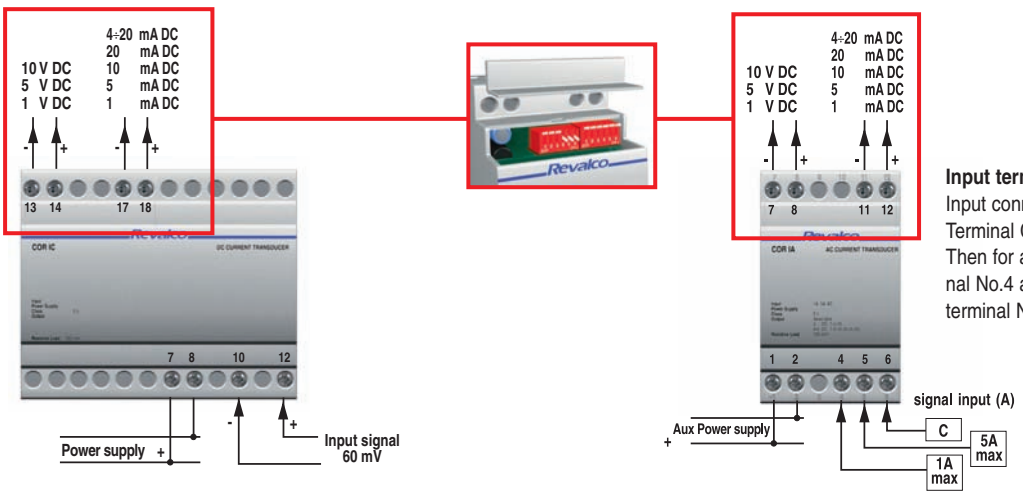
Where a Voltage output is required connection is by terminal N 13 and 14; for Current output connect to terminals N 17 and 18.

AC CURRENT - 1CORIA

The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:



Where a Voltage output is required connection is by terminal N 7 and 8; for Current output connect to terminal N 11 and 12.



Input terminal selection

Input connection is achieved by using Terminal C (No.6) for the common. Then for an Input of 1 Amp select terminal No.4 and for an Input of 5 Amp select terminal No.5 (as shown in the diagram)

VOLTAGE TRANSDUCERS

SELF SUPPLIED

	1CORUAA 100 20	1CORUAA 100R3 20	1CORUAA 230 20	1CORUAA 400 20	1CORUAA 100 10	1CORUAA 100R3 10	1CORUAA 230 10	1CORUAA 400 10
- NOMINAL INPUT VALUES	100V	100:√3V	230V	400V	100V	100:√3V	230V	400V
- NOMINAL OUTPUT VALUES	20 mA DC	20 mA DC	20 mA DC	20 mA DC	10 V DC	10 V DC	10 V DC	10 V DC
- RESISTIVE LOAD	300Ω	300Ω	300Ω	300Ω	>10kΩ	>10kΩ	>10kΩ	>10kΩ
- MEASURING RANGE	0 ÷ In							
- ACCURACY CLASS	1							
- OVERLOAD	**Permanent:** 1,2 In **Instantaneous:** 10 In for 1 sec.							
- RESPONSE TIME	≤ 300 ms							
- ALTERNATED RESIDUAL	≤ 2%							
- OPERATING FREQUENCY	50/60 Hz							
- BURDEN	3 VA							
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	2kV for 1min at 50Hz							
- OPERATING TEMPERATURE	0 °C ÷ +55 °C							
- INPUT WAVE FORM	OS							
- DIMENSIONS / WEIGHT Kg.	2 DIN modules / 0,25							

- **Different technical characteristic can be considered, under specific requests**

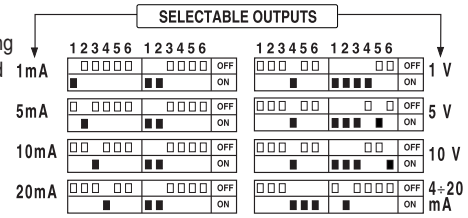
EXTERNAL POWER SUPPLY

- AUXILIARY SUPPLY (separate)	230V AC standard
- NOMINAL INPUT VALUES	to be specified when ordering
- NOMINAL OUTPUT VALUES (selectable)	1 - 5 - 10 VDC and 1 - 5 - 10 - 20 - 4/20 mA DC
- RESISTIVE LOAD	700Ω
- MEASURING RANGE	0 ÷ In
- ACCURACY CLASS	0,5
- OVERLOAD	**Permanent:** 2 In **Instantaneous:** 10 In for 1 sec.
- RESPONSE TIME	≤ 300 ms
- ALTERNATED RESIDUAL	≤ 1%
- OPERATING FREQUENCY	50/60 Hz
- BURDEN	current circuit: ≤ 0,8 VA - power supply: ≤ 4VA
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	
• insulation between inputs, outputs, power supply	2kV for 1min at 50Hz
• insulation between the all circuits and earth	4kV for 1min at 50Hz
- OPERATING TEMPERATURE	0 °C ÷ +55 °C
- INPUT WAVE FORM	OS
- DIMENSIONS / WEIGHT Kg.	6 DIN modules (3 DIN modules) / 0,54 (0,27)

- **Different technical characteristic can be considered, under specific requests**

DC VOLTAGE - 1CORUC

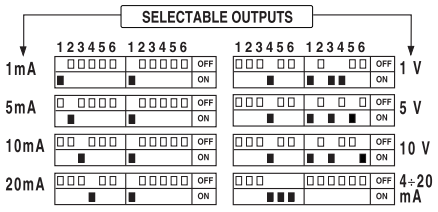
The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:



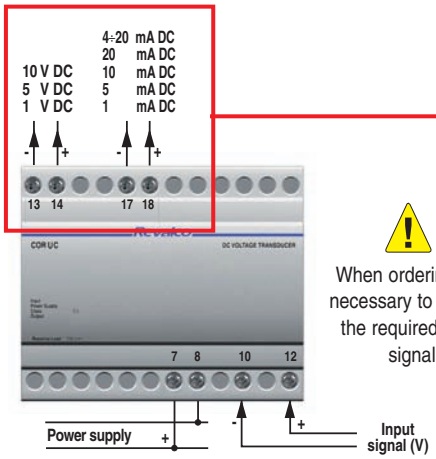
Where a Voltage output is required connection is by terminal Nos, 13 and 14 and for Current output connect to terminal Nos, 17 and 18.

AC VOLTAGE - 1CORUA

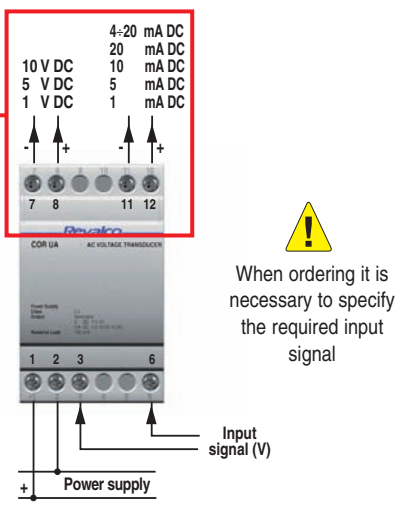
The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:



Where a Voltage output is required connection is by terminal Nos, 7 and 8 and for Current output connect to terminal Nos,11 and 12.



When ordering it is necessary to specify the required input signal



When ordering it is necessary to specify the required input signal

MEASUREMENT TRANSDUCERS - 1 DIN MODULE

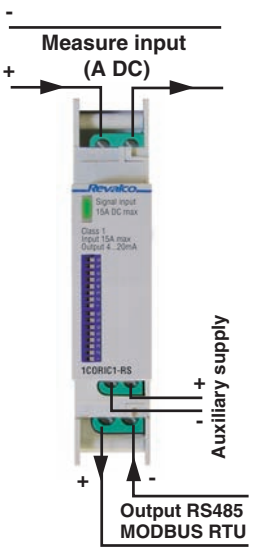
CURRENT TRANSDUCERS

OUTPUT 4/20mA

	1CORIC1-10A	1CORIC1-15A	1CORIC1-20A	1CORIC1-25A
- AUXILIARY SUPPLY	24VDC +/- 10%			
- BURDEN	32mA no load, 36 mA at 4mA 41 mA at 12mA, 47mA at 20mA			
- INPUT VALUES (single or bipolar to specify when ordering)	10A DC	15A DC	20A DC	25A DC
- INTERNAL SHUNT (resistance)	3 mΩ	3 mΩ	2 mΩ	1 mΩ
- DISSIPATION POWER	0,3 W	0,675 W	0,8 W	0,625 W
- MAXIMUM CURRENT FOR 1 sec	60A			
- RESISTIVE LOAD	500Ω max			
- ACCURACY CLASS	1%			
- RESPONSE TIME	1 sec			
- GALVANIC SEPARATION (insulation between inputs, outputs and power supply)	2kV for 1min at 50Hz			
- TEMPERATURE	-5 °C ÷ +55 °C			
- DIMENSIONS / WEIGHT kg.	1 DIN module / 0,27			
- READING FILTER	YES			
- STANDARDS	CE, EN 61010-1, EN 60742, EN 61000-6-4, EN 61000-6-2			
- FUNCTIONING INDICATORS	Red led (actual measure): it flashes during the measurement of input current Green led (active output): it flashes while the current value is converting			

OUTPUT RS485 – Address and speed selectable by frontal minidip

	1CORIC1-10A-RS	1CORIC1-15A-RS	1CORIC1-20A-RS	1CORIC1-25A-RS
- AUXILIARY SUPPLY	24VDC +/- 10%			
- BURDEN	70mA			
- INPUT VALUES (single or bipolar to specify when ordering)	10A DC	15ADC	20A DC	25A DC
- INTERNAL SHUNT (resistance)	3 mΩ	3 mΩ	2 mΩ	1 mΩ
- DISSIPATION POWER	0,3 W	0,675 W	0,8 W	0,625 W
- MAXIMUM CURRENT FOR 1 sec	60A			
- RESISTIVE LOAD	500Ω max			
- ACCURACY CLASS	1%			
- RESPONSE TIME	1 sec			
- GALVANIC SEPARATION (insulation between inputs, outputs and power supply)	2kV for 1min at 50Hz			
- TEMPERATURE	-5 °C ÷ +55 °C			
- DIMENSIONS / WEIGHT kg.	1 DIN module / 0,27			
- READING FILTER	YES			
- STANDARDS	CE, EN61010-1, EN60688, EN61000-6-4, EN61000-6-2			
- FUNCTIONING INDICATORS	Green led (actual measure): it flashes during the measurement of input current			
- MAX 32 DEVICES ON THE SAME RING, FOR MORE QUANTITIES USE REPEATERS OR RS485 CONCENTRATOR				



Selection of binary MODBUS node number

Address	Dip 8 (H)	Dip 7	Dip 6	Dip 5	Dip 4	Dip 3	Dip 2	Dip 1(L)
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
253	ON	ON	ON	ON	ON	ON	OFF	ON

Note: node 0 selection cannot be used (module doesn't answer)

Selection of RS485 speed

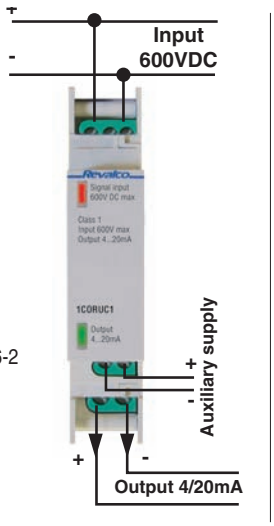
Speed (bps)	Dip 12	Dip 11	Dip 10	Dip 9
9600	OFF	OFF	OFF	OFF
19200	OFF	OFF	OFF	ON
38400	OFF	OFF	ON	OFF
57600	OFF	OFF	ON	ON
115200	OFF	ON	OFF	OFF

VOLTAGE TRANSDUCERS

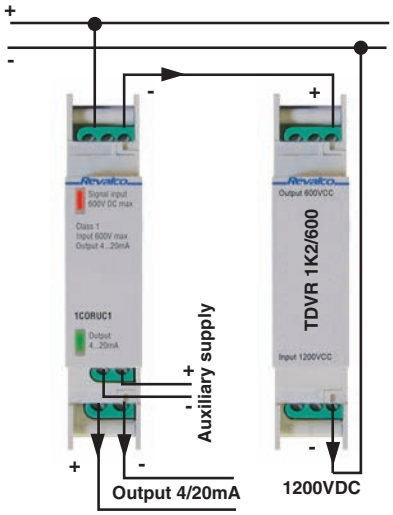
OUTPUT 4/20mA

	1CORUC1-600V	1CORUC1-1K2V
- **AUXILIARY SUPPLY**	24VDC +/- 10%	
- **BURDEN**	32mA no load, 36 mA at 4mA 41 mA at 12mA, 47mA at 20mA	
- **INPUT VALUES** single pole	600 VDC max	1200 VDC max
- **RESISTIVE LOAD**	500Ω max	
- **ACCURACY CLASS**	1%	
- **RESPONSE TIME**	1 sec	
- **GALVANIC SEPARATION** (insulation between inputs, outputs and power supply)	2kV for 1min at 50Hz	
- **TEMPERATURE**	-5 °C ÷ +55 °C	
- **DIMENSIONS / WEIGHT kg**	1 DIN module / 0,27	
- **READING FILTER**	YES	
- **STANDARDS**	CE, EN 61010-1, EN 60742, EN 61000-6-4, EN 61000-6-2	

- **FUNCTIONING INDICATORS**
  Red led (actual measure): it flashes during the measurement of input current
  Green led (active output): it flashes while the current value is converting



1CORUC1-600V

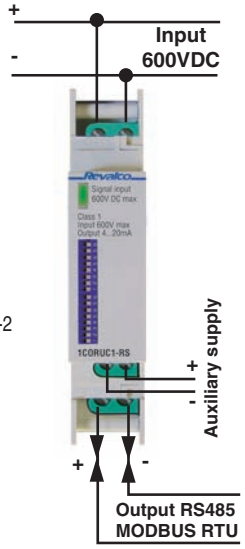


1CORUC1-1K2V

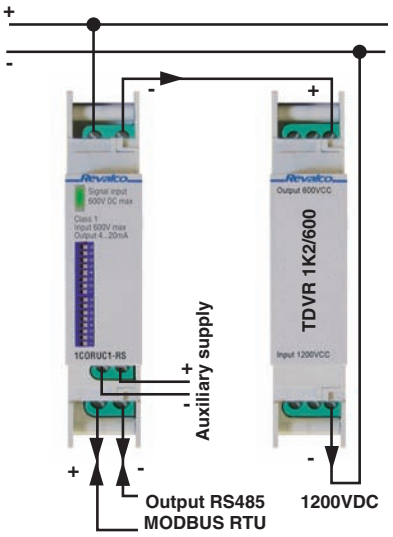
OUTPUT RS485 – Address and speed selectable by frontal minidip

	1CORUC1-600V-RS	1CORUC1-1K2V-RS
- **AUXILIARY SUPPLY**	24VDC +/- 10%	
- **BURDEN**	80 mA	
- **INPUT VALUES** single pole	600 VDC max	1200 VDC max
- **RESISTIVE LOAD**	500Ω max	
- **ACCURACY CLASS**	1%	
- **RESPONSE TIME**	1 sec	
- **GALVANIC SEPARATION** (insulation between inputs, outputs and power supply)	2kV for 1min at 50Hz	
- **TEMPERATURE**	-5 °C ÷ +55 °C	
- **DIMENSIONS / WEIGHT kg.**	1 DIN module / 0,27	
- **READING FILTER**	YES	
- **STANDARDS**	CE, EN61010-1, EN60688, EN61000-6-4, EN61000-6-2	

- **FUNCTIONING INDICATORS**
  Green led (actual measure): it flashes during the measurement of input current
- **MAX 32 DEVICES ON THE SAME RING, FOR MORE QUANTITIES USE REPEATERS OR RS485 CONCENTRATOR**



1CORUC1-600V-RS



1CORUC1-1K2V-RS

Selection of binary MODBUS node number

Address	Dip 8 (H)	Dip 7	Dip 6	Dip 5	Dip 4	Dip 3	Dip 2	Dip 1(L)
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
253	ON	ON	ON	ON	ON	ON	OFF	ON

Note: node 0 selection cannot be used (module doesn't answer)

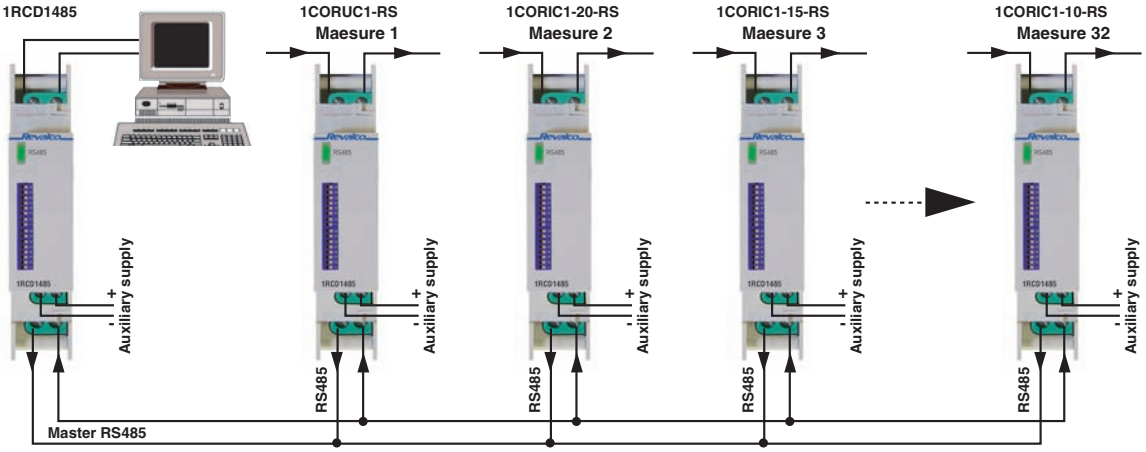
Selection of RS485 speed

Speed (bps)	Dip 12	Dip 11	Dip 10	Dip 9
9600	OFF	OFF	OFF	OFF
19200	OFF	OFF	OFF	ON
38400	OFF	OFF	ON	OFF
57600	OFF	OFF	ON	ON
115200	OFF	ON	OFF	OFF

RS485 CONCENTRATOR - 1RCD1485

Impulses concentrator for 2 .... 32 devices in one sole serial output RS485

- **AUXILIARY SUPPLY** 24VDC +/- 10% **- BURDEN** 80mA
- **INPUT** serial RS485 MODBUS RTU SLAVE with address and transmission speedy selectable by a frontal minidip
- **OUTPUT** serial RS485 (9600 Bps) MODBUS RTU master to the transducers (max 32)
- **GALVANIC SEPARATION** (insulation between RS485); 2kV for 1min at 50Hz (high frequency transformer)
- **TEMPERATURE** -5 °C ÷ +55 °C **- DIMENSIONS / WEIGHT kg.** 1 DIN module / 0,27
- **DATA CONTROL** Software CRC
- **STANDARDS** CE, EN 61010-1, EN 60742, EN 61000-6-4, EN 61000-6-2
- **FUNCTIONING INDICATORS** Red = TX master, Yellow = RX master, Green = TX slave, White = RX slave



Selection of binary MODBUS node number

Address	Dip 8 (H)	Dip 7	Dip 6	Dip 5	Dip 4	Dip 3	Dip 2	Dip 1(L)
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
253	ON	ON	ON	ON	ON	ON	OFF	ON

Note: node 0 selection cannot be used (module doesn't answer)

Selection of RS485 speed

Speed (bps)	Dip 12	Dip 11	Dip 10	Dip 9
9600	OFF	OFF	OFF	OFF
19200	OFF	OFF	OFF	ON
38400	OFF	OFF	ON	OFF
57600	OFF	OFF	ON	ON
115200	OFF	ON	OFF	OFF

EXAMPLE OF REMOTE MEASUREMENT GROUP USE

It is possible to combine several current and/or voltage modules up to 32 units maximum with the scope to realize one local measurement unit.

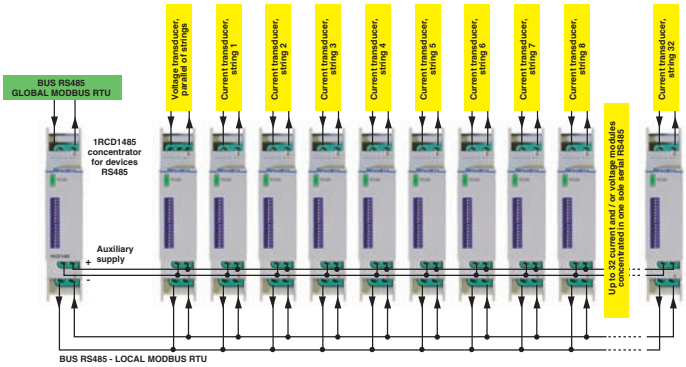
Not necessarily these modules need to be matched; they can be deployed in an area and then concentrated on the global bus.

A concentrator module collects inside it, automatically, all measurement data present on the local bus and makes them available, all together, on the global bus having as reference only one modbus address.

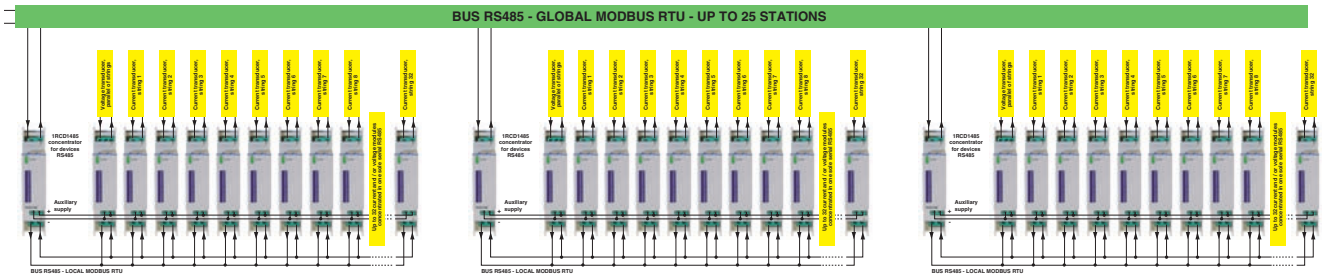
The measures collection system can be a mix of local units concentrated, and individual modules up to the saturation of modbus addresses.

The whole system can be designed flexibly, modified at any time, easily expanded or supplemented in subsequent times

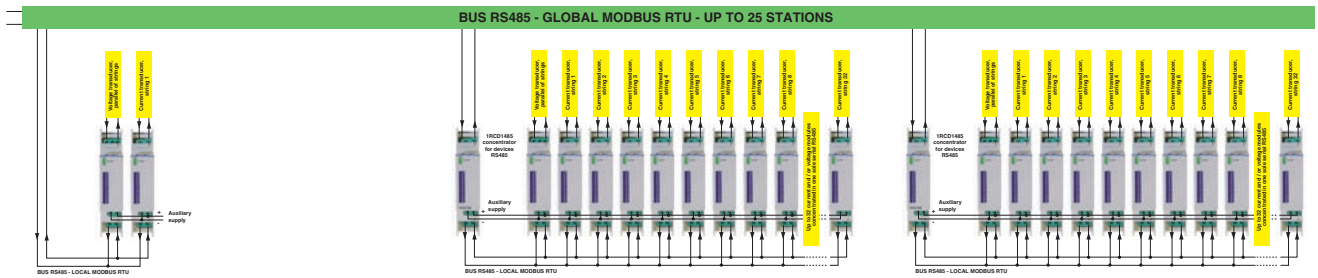
Modules allow the removal or installation also in the presence of auxiliary power



LINE 1



LINE 2



Data acquisition system from remote, up to 250 measures groups (2x125)

POWER FACTOR TRANSDUCERS

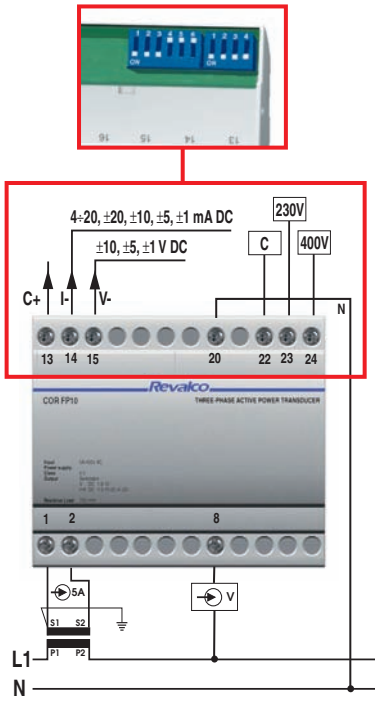
1CORFP10 - 1CORFP20

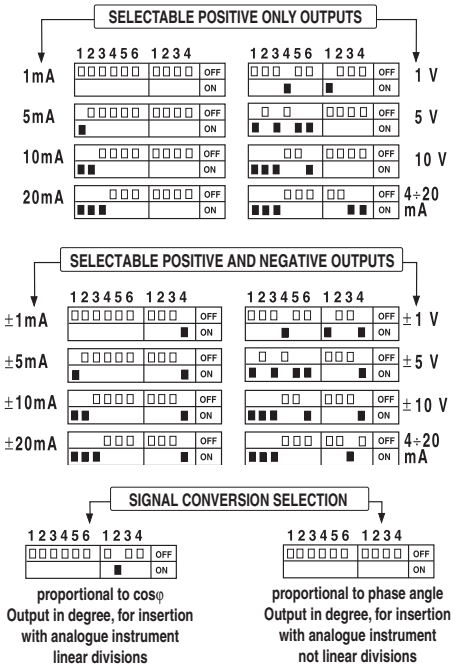
The transducer have galvanic separation between inputs and outputs and the capability to offer multiple choice by terminal selection and 8 outputs (±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mA DC). It is also possible to select the required conversion between:
- **proportional to the phase angle,** with output 1mA DC (in degrees) for connection with an analogue measuring instrument.
- **proportional to cos φ** with output ±1, ±5, ±10, ±20, ±4/20 mA and ±1, ±5, ±10 V for all other use

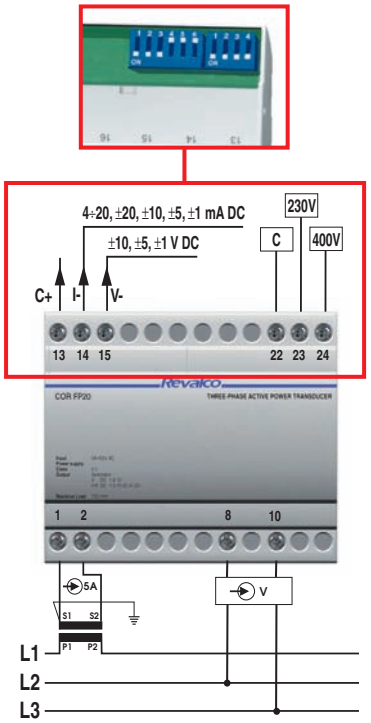
	1CORFP10 - Single phase	1CORFP20 - Three phase, balanced load, 3 wires
- AUXILIARY SUPPLY (separate)	230V AC standard	230V / 400V AC standard
- NOMINAL INPUT VALUES VOLTAGE	230V AC 50/60 Hz	400V AC 50/60 Hz
	current: 5A (1A on 1CORFP...B type)	current: 5A (1A on 1CORFP...B type)
- NOMINAL OUTPUT VALUES (selectable)	±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mA DC	
- RESISTIVE LOAD / ACCURACY CLASS	700Ω max / 0,5	
- MEASURING RANGE	0,5 (cap) - 1 - 0,5 (ind) standard	
- OVERLOAD	**Permanent:** 2 In / 1,2 Un - **Instantaneous**: 10 In / 2 Un for 1 sec	
- RESPONSE TIME / ALTERNATED RESIDUAL	≤ 300 ms / ≤ 1%	
- BURDEN	voltage circuit ≤ 1VA current circuit ≤ 0,8VA power supply ≤ 4VA	
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	insulation between inputs, outputs, power supply 2kV for 1min at 50Hz	
	insulation between the all circuits and earth 4kV for 1min at 50Hz	
- OPERATING TEMPERATURE / INPUT WAVE FORM	0 °C ÷ +55 °C / OS - OSD (schemes D10, D2)	
- DIMENSIONS / WEIGHT Kg.	6 DIN modules / 0,50	
- Different technical characteristic can be considered, under specific requests		

1CORFP10

The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram: where a Voltage output is required connection is by terminal Nos, 13 and 15 and for Current output connect to terminal Nos, 13 and 14. The auxiliary Power Supply is achieved by: use terminal 22 as the common connection; for 230V connect to Terminal 23; for 400V connect to Terminal 24



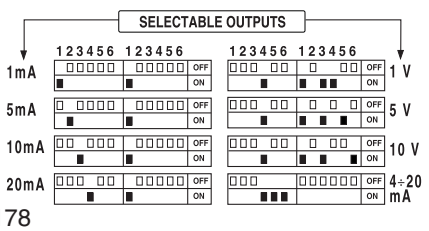




FREQUENCY TRANSDUCERS

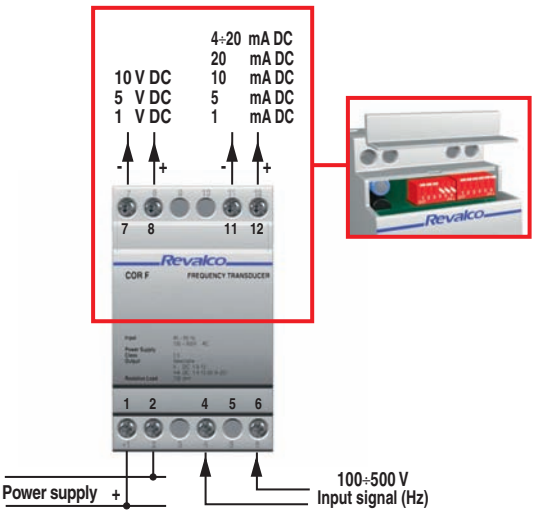
1CORF

- AUXILIARY SUPPLY (separate)	230V AC standard
- NOMINAL INPUT VALUES VOLTAGE	100V ÷ 500V AC
- NOMINAL OUTPUT VALUES (selectable)	1 - 5 - 10 - VDC and 1 - 5 - 10 - 20 - 4/20 mA DC
- RESISTIVE LOAD / ACCURACY CLASS	700Ω / 0,5
- MEASURING RANGE	45 / 65 Hz standard (other on request)
- OVERLOAD	**Permanent:** 1,2 Un **Instantaneous:** 2 Un for 1 sec.
- RESPONSE TIME / ALTERNATED RESIDUAL	≤ 300 ms / ≤ 1%
- BURDEN	voltage ≤ 1VA power supply ≤ 4VA
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	
• insulation between inputs, outputs, power supply	2kV for 1min at 50Hz
• insulation between the all circuits and earth	4kV for 1min at 50Hz
- OPERATING TEMPERATURE / INPUT WAVE FORM	0 °C ÷ +55 °C / OS - OQ - OSP
- DIMENSIONS / WEIGHT Kg.	3 DIN modules / 0,25
- Different technical characteristic can be considered, under specific requests	



The selection of the required output is achieved by adjusting the minidip keys as described in the diagram.

Where a Voltage output is required connection is by terminal Nos, 7 and 8 and for Current output connect to terminal Nos, 11 and 12



SINGLE PHASE ACTIVE AND REACTIVE POWER TRANSDUCERS

1CORPA10 / 1CORPR10 - 1CORPA10485 / 1CORPR10485

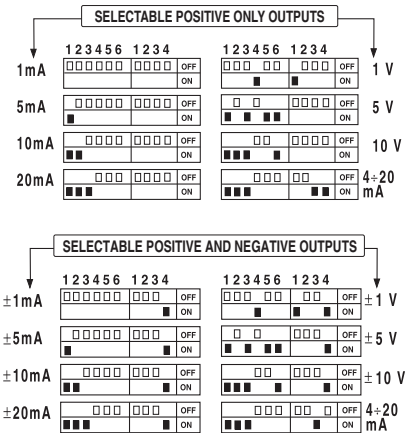
These transducers have the galvanic separation between inputs and outputs, and have the capability to offer multiple choice auxiliary supply of (230V, 400V) by terminal selection and 8 Outputs (1-5-10 VDC and 1-5-10-20-4/20 mA DC), by minidip key located under a removable section of the upper case wall and by terminal selection.
The standard calibration is: 100V, 5A = 500 W (var) 230V, 5A = 1000 W (var) 400V, 5A = 2000 W (var)

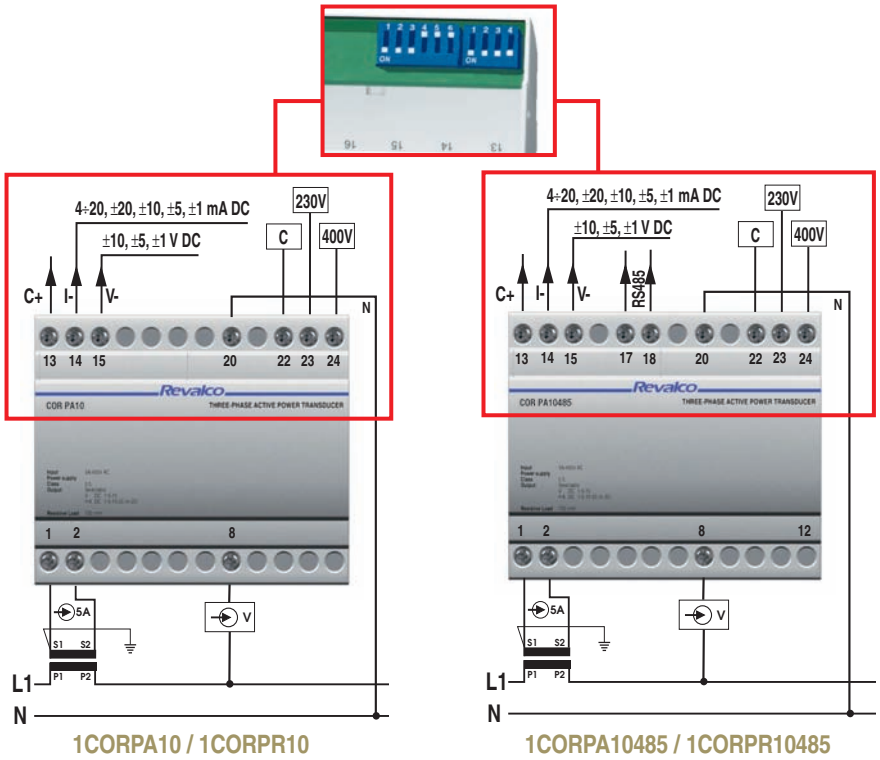
	1CORPA10 1CORPR10	1CORPA10485 1CORPR10485
Active Power Reactive Power	•	• •
- SELECTABLE BIDIRECTIONAL OUTPUTS		•
- SELECTABLE BIDIRECTIONAL OUTPUTS WITH SERIAL OUTPUT RS485		
- MODBUS SLAVE RTU PROTOCOL		
- INPUT WAVE FORM	OS - OSD (schemes D10, D2)	
- NOMINAL OUTPUT VALUES (selectable)	±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mADC	
- AUXILIARY SUPPLY (separate)	230V / 400V AC standard	
- NOMINAL INPUT VALUES	voltage: 230V standard - current: 5A (1A on request)	
- RESISTIVE LOAD / MEASURING RANGE	700Ω max / 0 ÷ Pn (0 ÷ Qn)	
- STANDARD CALIBRATION	100V,5A=500W (var) 230V,5A=1000W (var) 400V,5A=2000W (var)	
- ACCURACY CLASS / OPERATING FREQUENCY	0,5 / 50 - 60 Hz	
- OVERLOAD	**Permanent:** 2 In / 1,2 Un **Instantaneous:** 10 In / 2 Un for 1 sec.	
- RESPONSE TIME / ALTERNATED RESIDUAL	≤ 300 ms / ≤ 1%	
- BURDEN	voltage circuit ≤ 1VA current circuit ≤ 0,8VA power supply ≤ 4VA	
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	insulation between inputs, outputs, power supply 2kV for 1min at 50Hz insulation between the all circuits and earth 4kV for 1min at 50Hz	
- OPERATING TEMPERATURE / DIMENSIONS / WEIGHT Kg.	0 °C ÷ +55 °C / 6 DIN modules / 0,50	

Different technical characteristic can be considered, under specific requests.
The software is available, free of charge, on our internet address www.revalco.it

1CORPA10 / 1CORPA10485 - 1CORPR10 / 1CORPR10485

The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:
where a Voltage output is required connection is by terminal Nos, 13 and 15 and for Current output connect to terminal Nos, 13 and 14.
The auxiliary Power Supply is achieved by: use terminal 22 as the common connection; for 230V connect to Terminal 23; for 400V connect to Terminal 24





1CORPA10 / 1CORPR10 1CORPA10485 / 1CORPR10485

THREE PHASE ACTIVE OR REACTIVE POWER TRANSDUCERS

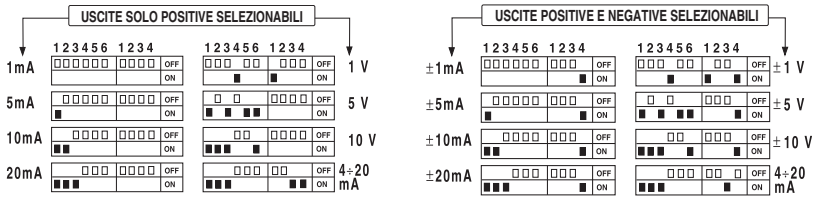
These transducers have the galvanic separation between inputs and outputs, and have the capability to offer multiple choice auxiliary supply of (230V, 400V) by terminal selection and 8 Outputs (1-5-10 VDC and 1-5-10-20-4/20 mA DC), by minidip key located under a removable section of the upper case wall and by terminal selection.
The standard calibration is: 100V, 5A = 1000 W (var) 230V, 5A = 2000 W (var) 400V, 5A = 4000 W (var)

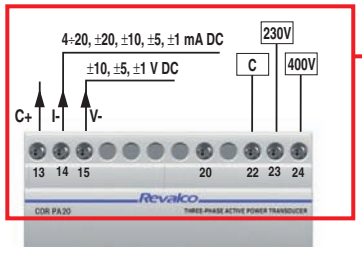
	Balanced load 3 wires without neutral		Unbalanced load 3 wires with neutral (Aron)	
Active Power	1CORPA20	1CORPA20485	1CORPA30	1CORPA30485
Reactive Power	1CORPR20	1CORPR20485	1CORPR30	1CORPR30485
- SELECTABLE BIDIRECTIONAL OUTPUTS	•	•	•	•
- SELECTABLE BIDIRECTIONAL OUTPUTS WITH SERIAL OUTPUT RS485		•		•
- MODBUS SLAVE RTU PROTOCOL		•		•
- INPUT WAVE FORM	OS - OSD (schemes D10, D2)			
- NOMINAL OUTPUT VALUES (selectable)	±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mADC			
- AUXILIARY SUPPLY (separate)	230V / 400V AC standard			
- NOMINAL INPUT VALUES	voltage: 400V standard - current: 5A (1A on request)			
- RESISTIVE LOAD / MEASURING RANGE	700Ω max / 0 ÷ Pn (0 ÷ Qn)			
- STANDARD CALIBRATION	100V,5A=1000W (var) 230V,5A=2000W (var) 400V,5A=4000W (var)			
- ACCURACY CLASS / OPERATING FREQUENCY	0,5 / 50 - 60 Hz			
- OVERLOAD	**Permanent:** 2 In / 1,2 Un **Instantaneous:** 10 In / 2 Un for 1 sec.			
- RESPONSE TIME / ALTERNATED RESIDUAL	≤ 300 ms / ≤ 1%			
- BURDEN	voltage circuit ≤ 1VA current circuit ≤ 0,8VA power supply ≤ 4VA			
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	insulation between inputs, outputs, power supply 2kV for 1min at 50Hz insulation between the all circuits and earth 4kV for 1min at 50Hz			
- OPERATING TEMPERATURE / DIMENSIONS / WEIGHT Kg.	0 °C ÷ +55 °C / 6 DIN modules / 0,50			

Different technical characteristic can be considered, under specific requests. The software is available, free of charge, on our internet address www.revalco.it

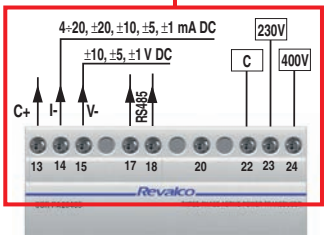
CONNECTION DIAGRAMS

The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:
where a Voltage output is required connection is by terminal Nos, 13 and 15 and for Current output connect to terminal Nos, 13 and 14.
The auxiliary Power Supply is achieved by: use terminal 22 as the common connection; for 230V connect to Terminal 23; for 400V connect to Terminal 24

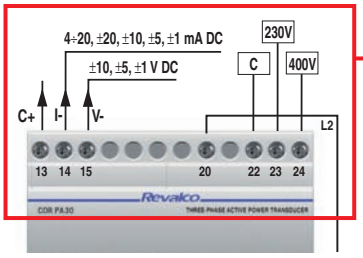




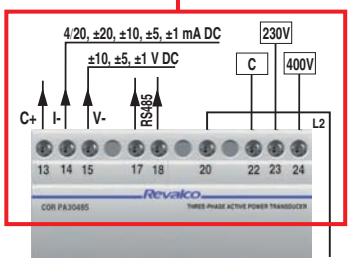
1CORPA20
1CORPR20



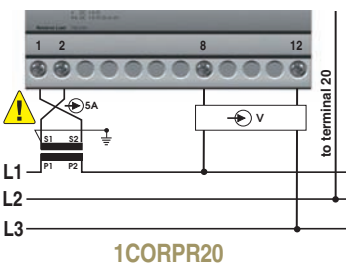
1CORPA20485
1CORPR20485



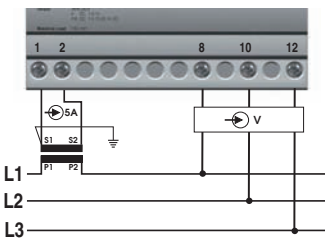
1CORPA30
1CORPR30



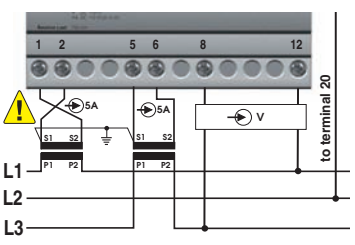
1CORPA30485
1CORPR30485



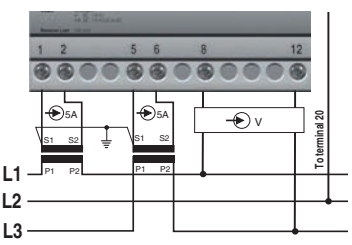
1CORPR20
1CORPR20485



1CORPA20
1CORPA20485



1CORPR30
1CORPR30485



1CORPA30
1CORPA30485

THREE PHASE ACTIVE OR REACTIVE POWER TRANSDUCERS

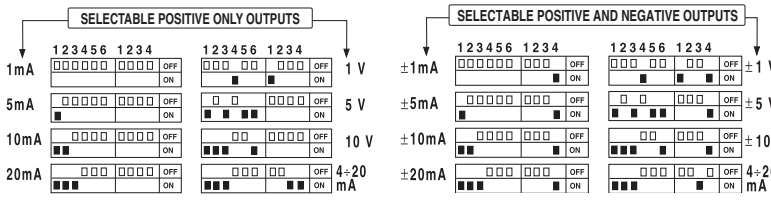
These transducers have the galvanic separation between inputs and outputs, and have the capability to offer multiple choice auxiliary supply of (230V, 400V) by terminal selection and 8 Outputs (1-5-10 VDC and 1-5-10-20-4/20 mA DC), by minidip key located under a removable section of the upper case wall and by terminal selection.
The standard calibration is: 100V, 5A = 1000 W (var) 230V, 5A = 2000 W (var) 400V, 5A = 4000 W (var)

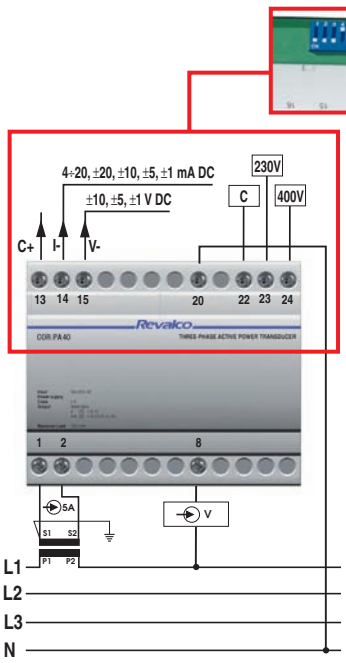
	Balanced load 4 wires with neutral		Unbalanced load 4 wires with neutral	
Active Power	1CORPA40	1CORPA40485	1CORPA50	1CORPA50485
Reactive Power	1CORPR40	1CORPR40485	1CORPR50	1CORPR50485
- SELECTABLE BIDIRECTIONAL OUTPUTS	•		•	
- SELECTABLE BIDIRECTIONAL OUTPUTS WITH SERIAL OUTPUT RS485		•		•
- MODBUS SLAVE RTU PROTOCOL		•		•
- INPUT WAVE FORM		•		•
- NOMINAL OUTPUT VALUES (selectable)	OS - OSD (schemes D10, D2)			
- AUXILIARY SUPPLY (separate)	±1, ±5, ±10 VDC and ±1, ±5, ±10, ±20, 4/20 mADC			
- NOMINAL INPUT VALUES	230V / 400V AC standard			
- RESISTIVE LOAD / MEASURING RANGE	voltage: 400V standard - current: 5A (1A on request)			
- STANDARD CALIBRATION	700Ω max / 0 ÷ Pn (0 ÷ Qn)			
- ACCURACY CLASS / OPERATING FREQUENCY	100V,5A=1000W (var) 230V,5A=2000W (var) 400V,5A=4000W (var)			
- OVERLOAD	0,5 / 50 - 60 Hz			
- RESPONSE TIME / ALTERNATED RESIDUAL	**Permanent:** 2 In / 1,2 Un **Instantaneous:** 10 In / 2 Un for 1 sec.			
- BURDEN	≤ 300 ms / ≤ 1%			
- GALVANIC SEPARATION BETWEEN INPUTS AND OUTPUTS	voltage circuit ≤ 1VA current circuit ≤ 0,8VA power supply ≤ 4VA insulation between inputs, outputs, power supply 2kV for 1min at 50Hz insulation between the all circuits and earth 4kV for 1min at 50Hz			
- OPERATING TEMPERATURE / DIMENSIONS / WEIGHT Kg.	0 °C ÷ +55 °C / 6 DIN modules / 0,50			

Different technical characteristic can be considered, under specific requests.The software is available, free of charge, on our internet address www.revalco.it

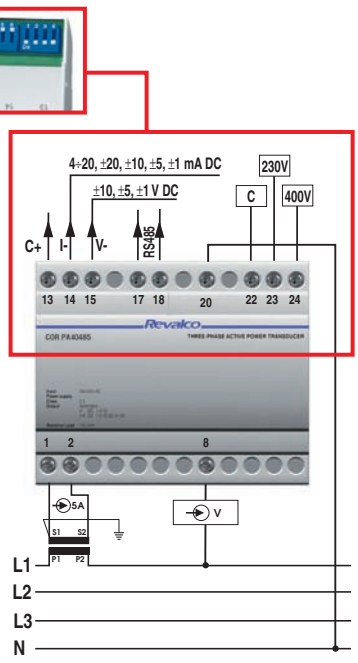
CONNECTION DIAGRAMS

The selection of the required output is achieved by adjusting the minidip keys as described in the following diagram:
where a Voltage output is required connection is by terminal Nos, 13 and 15 and for Current output connect to terminal Nos, 13 and 14.
The auxiliary Power Supply is achieved by: use terminal 22 as the common connection; for 230V connect to Terminal 23; for 400V connect to Terminal 24

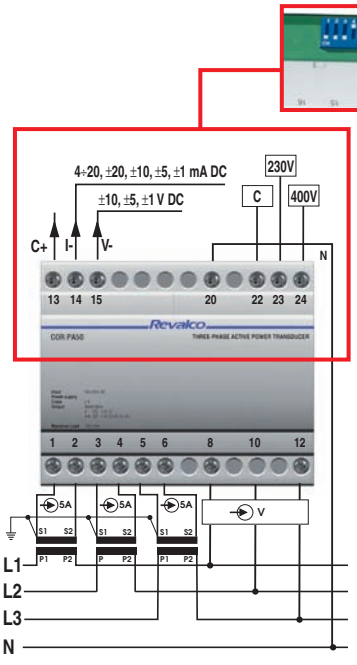




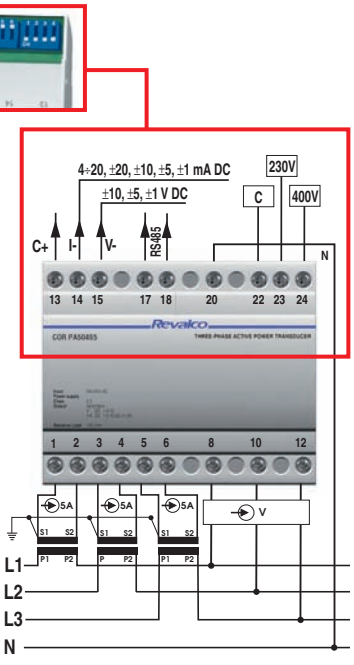
1CORPA40
1CORPR40



1CORPA40485
1CORPR40485



1CORPA50
1CORPR50



1CORPA50485
1CORPR50485