

Current and Voltage Controls

Current Transformer, 3-Phase

Types A 74-10, A 74-11

CARLO GAVAZZI



- 3-phase current metering transformers for use with current control relays

Measuring ranges:

A 74-10 5:	0.5 - 5 AAC
A 74-10 20:	2 - 20 AAC
A 74-11 100:	10 - 100 AAC
A 74-11 500:	50 - 500 AAC

Product Description

3-phase current transformer measures on all three phases. Output voltage proportional to measured amplitude of the rms-value of the normal phase current.

Ordering Key

A 74-10 5

Type _____
Input current _____

Type Selection

Input current	Type no.
5 AAC	A 74-10 5
20 AAC	A 74-10 20
100 AAC	A 74-11 100
500 AAC	A 74-11 500

Input Specifications

	A 74-10 5	A 74-10 20	A 74-11 100	A 74-11 500
Current range	0.5 - 5 AAC	2 - 20 AAC	10 - 100 AAC	50 - 500 AAC
Max. current (continuously)	20 AAC	50 AAC	250 AAC	750 AAC
Max. overload current (t = 30 s)	40 AAC	85 AAC	325 AAC	1000 AAC
Rated insulation voltage Input-output	1000 VAC _{rms}	1000 VAC _{rms}	1000 VAC _{rms}	1000 VAC _{rms}
Overvoltage category	IV (IEC 60664)	IV (IEC 60664)	IV (IEC 60664)	IV (IEC 60664)
Dielectric strength Dielectric voltage Rated impulse withstand volt.	6 kVAC _{rms} 12 kV (1.2/50 μs)	6 kVAC _{rms} 12 kV (1.2/50 μs)	6 kVAC _{rms} 12 kV (1.2/50 μs)	6 kVAC _{rms} 12 kV (1.2/50 μs)
Power consumption	< 0.1 W@5 A	< 0.25 W@20 A	< 1.5 W@100 A	< 21 W@1500 A

Output Specifications

	A 74-10 5	A 74-10 20	A 74-11 100	A 74-11 500
Output voltage (T _A = 20°C = 68°F), R _L = 9.5 kΩ)	0.4 - 4 V _p	0.4 - 4 V _p	0.4 - 4 V _p	0.4 - 4 V _p
Output impedance	< 700 Ω	< 200 Ω	< 40 Ω	< 10 Ω
Tolerance of output voltage @ rated input current	± 5%	± 5%	± 5%	± 5%
Temperature variation	± 0.1% per °C	± 0.1% per °C	± 0.1% per °C	± 0.1% per °C
Rated insulation voltage (cable)	250 VAC _{rms}	250 VAC _{rms}	250 VAC _{rms}	250 VAC _{rms}



General Specifications

Pollution degree		3 (IEC 60664)
Ambient temperature		- 20 to + 60°C (- 4 to + 140°F)
Housing		
Dimensions	A74-10	120 x 45 x 16 mm
	A74-11	150 x 114 x 23
Material		ABS
Weight		
	A 74-10	200 g
	A 74-11	750 g
Connection cable		2 m PVC, 4 x 0.4 mm ²
Approval		UL
CE Marking		Yes

Mode of Operation

The current metering transformer is connected to the current control relays H 475 as follows:

- Red core to **term. 5** - U₁.
 - White core to **term. 6** - U₂.
 - Yellow core to **term. 7** - U₃.
 - Black core to **term. 8**.
- (starpoint - neutral).

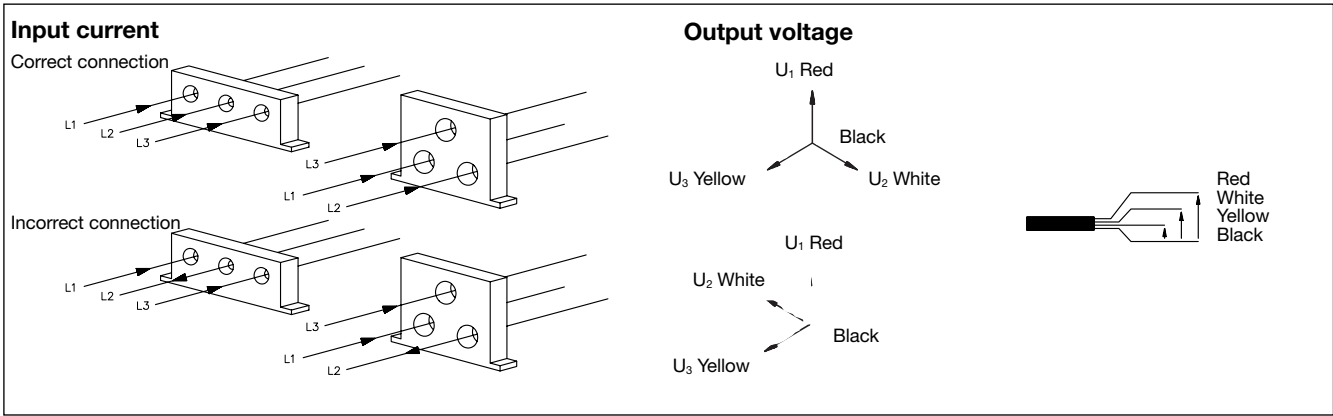
The metered conductor is drawn through the central hole of the current metering transformer. Drawing the con-

ductor through the hole several times makes it possible to meter currents below the nominal range.

If the conductor is drawn through the central hole e.g. 5 times, the metering transformer will register 50 A when the current in the conductor is 10 A.

In amplitude and phase the output voltage is proportional to the phase current metered.

Wiring Diagrams



Dimensions

