Energy Management 3-channel Power Transducer Type APT-DIN





- Measurement of: kW
- 9 selectable full-scales in 9 intervals from 0 to 5 (range from 0,4kW to 3,6kW)
- Degree of protection (front): IP 50
- 3 analogue outputs (0 to 10VDC)
- Response time: ≤50ms

Product Description

Active power transducer with auxiliary power supply of 400VAC (phase-phase connection). 9 measuring ranges selectable in 9 intervals from 0 to 5 (measuring range from 0,4 to 3,6kW) The house is for DIN-rail mounting and ensures a degree of protection (front) of IP 50.

Ordering Key APT-DINAV53G3 2 1

Model — Range code	
System ————	
Power supply ———	
Rated outputs———	
Number of inputs ——	
Calibration	

Type Selection

Rang	ge code	Syst	em	Pow	er supply	Ra	ted outputs
AV5:	400 VAC - 5,2 AAC (max. 480 V (L-L) - 6,2 A) (standard)	3:	Three phase system (3 wires, balanced/unbalanced load)	D:	230VAC -15+10% 50/60Hz	3:	3 x (0 to 10VDC)
Num	ber of inputs	Calil	bration	G:	400VAC -15+10% 50/60Hz		
 2:	2 x (3-phase inputs)	1:	3600W.	•			

Input Specifications

Rated inputs	2 (3-phase inputs) for current and voltage measurements		EN 60 688-1 unbalanced load: ≤5%
Accuracy		Measurement	kW
Active power (@ 25°C ± 5°C, R.H. ≤ 60%)	±3% rdg (cos φ 0.7 L/C, 0.5 to 1Ph)	Ranges (impedances) AV5:	400VAC (≤2W per channel) 5.2AAC (≤0.3 VA per channel)
Additional errors Humidity < 0.5%, 60% to 90% R.H. Input frequency < 0.5%, 50 to 60 Hz Magnetic field < 0.5% @ 400 A/m Ripple balanced load: ≤1% according to IEC 60688-1 and		Frequency range	48 to 62 Hz
		Over-load protection Continuous: voltage/current For 1 s	1.2 x rated input
		Voltage: Current:	2 x rated input 20 x rated input

Output Specifications

Analogue outputs		Analogue outputs	
Number of outputs	3 (one per channel)	Insulation	By means of optocouplers,
Range .	0 to 10 VDC		2000 V _{rms} output to
Response time	≤ 50 ms typical		measuring input /
Temperature drift	±500 ppm/°C		power supply
Load: 10 V output	≥ 10 kΩ		



Supply Specifications

AC voltage	400 VAC (standard), -15%+10% 50/60 Hz 230VAC (optional)	Power consumption	≤7 VA
	-15+10% 50/60Hz		

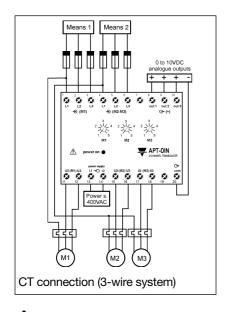
General Specifications

Operating temperature	-20 to +60°C (-4 to 140°F) (R.H. < 90% non-condensing)
Storage temperature	-30 to +80°C (-22 to 176°F) (R.H. < 90% non-condensing)
Insulation reference voltage	300 V _{rms} to ground (with neutral connection), CAT II (double insulation), CAT III (main insulation) Pollution degree 2
Insulation	4000 V _{rms} between all inputs/outputs to ground
Dielectric strength	4000 V _{rms} for 1 minute

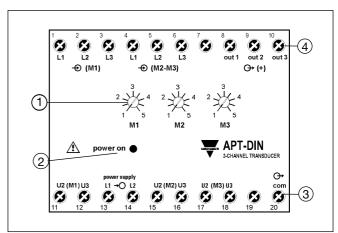
Noise rejection CMRR	100 dB, 48 to 62 Hz
EMC	EN 50081-1, EN 50082-1
Safety standards	
Safety requirements: Products requirements:	IEC 61010-1, EN 61010-1 IEC 60688-1, EN 60688-1
Connector	Screw-type, max. 4 mm ² wires
Housing	
Dimensions	115 x 76 x 100 mm
Material	ABS, self-extinguishing: UL94 V-0
Degree of protection	Front: IP50
Weight	Approx. 810 g (packing included)

Wiring Diagrams

Three-phase, 3-wire ARON input connections - Unbalanced loads



Front Panel Description



- 1. Rotary switch
 - 9-position rotary switch for input full scale selection (at every selected input full scale correspond a 10VDC output).
- 2. LED
 - Power-ON.
- 3. Connection terminal blocks
- 4. Connection terminal blocks

Dimensions

