

QP/DP

AC/DC Grid Transducer for DIN mounting

Description

AC/DC grid transducer converts an ac / dc voltage or current input into a load independent output signal. With excellent temperature characteristic and good working stability. The output signal is based on the a root mean square(rms) measurement of the input signal and hence the transducer can be used with distorted waveforms.

The unit conforms to IEC 60688. In a addition it meets the insulation requirements of IEC 60255-5, clauses 5, 6 and 8 as well as the high frequency disturbance test of IEC 60255-22 for Class III test voltage.

Features

- 0.2/0.5 measurement accuracy
- Support customized parameters
- RMS measurement and output
- 500ms response time
- Compact 1.5M width size (T type)
- 35mm Din rail mounting
- With RS485 port optional (T type)

Application

- Metering of distribution feeders, transformers, generators, capacitor banks and motors.
- Medium and low voltage systems.
- Measuring converter: optional association of an instantaneous parameter to one of the analogue outputs available (0...20 mA / 4...20 mA)



Technical characteristics

Signal Inputs	
Rating	QPV 0-100V, 0-220V, 0-380V DPV 0-5V, 0-10V QPA 0-1A, 0-5A, 0-10A DPA 4-20mA, 0-20mA
Overload	1.2 times rated continuous; 5sec @ 10 times of rated current 1sec @ 2 times of rated voltage
Burden	0.5VA
Measurement Output	
Standard outputs (others on request)	4~20mA or 0~5V 0~20mA; 5~10V; 0~10V;
Ripple	<0.5% peak to peak
Load Resistance	Current output: 0<Lr<510Ω; Voltage output: Lr>10KΩ
Measurement Accuracy	
Reference IEC 60688	0.5% or 0.2% @ F.S.
Adjustment	Potentiometer "ZERO" and "SPAN" "T" types no need extra adjustment
Frequency influence	<0.02% per Hz
Load influence	<0.25% of F.S. for specific load range
Auxiliary Supply	
Rating	85-265Vac/dc, Optional 12V, 24V, 48VDC
Consumption	<3VA
Galvanic isolation between I/O and AUX	
Test voltage	2KV RMS 50Hz for 1 minute
impulse	4KV 1.2/50μsec waveform
Temperature requirements	
Operating	-10~55C
Storage	-40~70C, 20 ~ 93%RH; Noncondensing

QP-X

AC Power Transducer Three phase for DIN mounting

Description

QP-X series AC power transducer converts three phase ac signals into a load independent dc signal proportional to voltage(V), current(A), active power (watt) and reactive power (var) Frequency(Hz) etc. Three output signals combination in one transducer.

The current and voltage signals are passed into the circuit via precision instrument transformers to provide galvanic isolation between the input circuits and the transducer circuitry. Each pair of current and voltage signals is mathematically multiplied together to produce a product signal proportional to true power and independent of wave shape and phase angle.

Features

- 0.5 measurement accuracy
- RMS measurement and output
- Three phase independent measurement
- Multiple output for each input
- 35mm Din rail mounting
- Optional RS485 port
- Support customized parameters



Technical characteristics

Power Signal Inputs	
Nominal input	../1A or ../5A C.T. connected 110V, 230V, 400V, 415V ac
Power consumption	<1 VA voltage <0.2 VA current 1.2 times continuous
Overload capacity	5sec @ 10 times of rated current 2sec @ 2 times of rated voltage
Frequency range	50Hz, 60Hz
Measurement Output	
Standard outputs (others on request)	4~20mA, 0~5V, 0~20mA; 5~10V; 0~10V;
Maximum load	<750 Ω (0-20mA, 4-20mA) >2000 Ω (voltage output)
Ripple	<1% peak to peak
Response time	<250ms 0-90% <500ms 0-99%
Measurement Accuracy	
Class	±0.5 % complying with IEC 60688
Accurate range	0 - 120% I
Frequency influence	<0.02% per Hz
Load influence	<0.25% of F.S. for specific load range
Auxiliary Supply	
Rating	85-265Vac/dc, Optional 12V, 24V, 48VDC
Consumption	<3VA
Galvanic isolation between I/O and AUX	
Test voltage	2KV RMS 50Hz for 1 minute
impulse	4KV 1.2/50μsec waveform
Temperature requirements	
Operating	-10~55C
Storage	-40~70C, 20 ~ 93%RH; Noncondensing

QPPX

AC Programmable Transducer Three phase for DIN mounting



Description

AC programmable transducer measures a wide range of electrical parameters and generates analog or digital output signals suitable for interfacing with instrumentation and control systems. Total four channel output, with panel key or PC control programmable, user can free to set 4 different data from max 26 electrical parameter for sampling and analog signal output.

Have three channel digital inputs and RS485-Modbus communication functionality. Can monitor the galvanically isolated DI signal and programmed the transducer with customized SCADA software, any of the measured parameters can be read out via the RS485 connection.

Features

- Accuracy 0.5 class
- 85~265VAC wide voltage AUX for most country and application
- With 4 channel output (support max 22 types parameter for analog output)
- Front panel with 4 keypad for analog parameter configuration, do not need extra configuration software.
- With RS485 port for remote electrical data
- 500ms response time
- 35mm Din rail mounting
- Advanced electrical parameter ready optional
- SOE function optional

Technical characteristics

Electrical Signal Inputs

Nominal input	1 or 5 Amp C.T. connected 110V, 230V, 240V, 400V, 415V ac +/-
Power consumption	<1 VA voltage <0.2 VA current
Overload capacity	1.2 times continuous 5sec @ 10 times of rated current 2sec @ 2 times of rated voltage
Frequency range	40~65Hz

Measurement Output

Standard outputs	4~20mA/ 0-20mA programmable (0~5V / 0~10V optional)
Maximum load	<390 Ω (current output) >10KΩ (voltage output)
Ripple	<1% peak to peak
Response time	<350ms 0-90% <500ms 0-99%

Measurement Accuracy

Class	0.2% / 0.5 complying with IEC 60688
Accurate range	0 - 120% I
Frequency influence	<0.05% per Hz
Load influence	<0.25% of F.S. for specific load range

Auxiliary Supply

Rating	85-265Vac/dc, Optional 12V, 24V, 48VDC
Consumption	<3VA

Galvanic isolation between I/O and AUX

Test voltage	2KV RMS 50Hz for 1 minute
impulse	4KV 1.2/50μsec waveform

Temperature requirements

Operating	-10~55C
Storage	-40~70C, 20 ~ 93%RH ; Noncondensing

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Series Name	Optional Type
1 Product ID	QP: for AC grid measurement and transducer DP: for DC grid measurement and transducer
2 Input electrical signal	V: single phase voltage A: single phase current VX: three phase voltage AX: three phase current W: three phase active power K: three phase reactive power WK: three phase active & reactive power PX: three phase combination input (user free configure)
3 Input signal range	A0: Customized current input A1: 0~1A A2: 0~5A V0: Customized current input V1: 0~5V V2: 0~10V V3: 0~100V V4: 0~220V V5: 0~400V
4 Output signal range	S0: Customized current output S1: 0~20mA S2: 4~20mA S3: 0~5V S4: 0~10V
5 Power supply	P1: 85~265VAC P2: 24VDC P3: 48VDC

Notes: 1. Product specifications will change from time to time. Please contact Blue Jay for latest specifications.
2. Please confirm all the parameters with our staff before ordering.
3. Have special requirements, please contact Blue Jay Technical Support Team: tech@cqbluejay.com

Typical Dimension

