



SYNECTIC ELECTRONICS

SY020 Frequency to analogue converter



- SY020 covers a wide frequency range 16 – 4400Hz (full scale).
- The gain can be calibrated to any value within a given range (see electrical characteristics) by using fine adjustment via the trimmer.
- Any voltage between 10 (17V for 10V version) and 30V can be supplied drawing a current between 4mA and 20mA dependent on the input frequency.

The SY020 can be linked to any frequency generating device e.g. flow meters which gives TTL pulse, reed switch or coil output, converting the frequency to an analogue signal. This can be 4 – 20mA loop current or a voltage output. They SY020 can be supplied pre-set to a particular range alternately the user can configure the unit themselves by setting the jumper links to select the meter signal type and any one of the 8 full scale ranges from 16 – 35Hz up to 2000 – 4400Hz. It can be supplied as PCB only or a din rail mount version, the din rail mount version is the most convenient for many applications. Alternatively it can be supplied housed in an IP65 sealed ABS case with moulded glands and mounting lugs for wall mounting.

Electrical characteristics

Parameter	Minimum	Maximum
Supply voltage (Vdc)	10 (17 for 10V version)	30
Frequency range (Hz)	0-16	0-4400
Operating temperature (C)	0	50

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Inquiries and trouble shooting

For any inquiries and problems with the SY020 or any other available products checkout our website or send an email using the appropriate link below.

Website: www.synectic.co.uk

Email: technical@synectic.co.uk

Order codes

SY020/2-PRC	Coil, pulse and reed switch input to 4 – 20mA converter (bare board)
SY020/2-PRC-B	Coil, pulse and reed switch input to 4 – 20mA converter in IP65 case
SY020/2-PRC-D	Coil, pulse and reed switch input to 4 – 20mA converter in din rail case
SY020/2-PRV10	Coil, pulse and reed switch input to 0 – 10V converter (bare board)
SY020/2-PRV10-B	Coil, pulse and reed switch input to 0 – 10V converter in IP65 case
SY020/2-PRV10-D	Coil, pulse and reed switch input to 0 – 10V converter in din rail case
SY020/2-PRV5	Coil, pulse and reed switch input to 0 – 5V converter (bare board)
SY020/2-PRV5-B	Coil, pulse and reed switch input to 0 – 5V converter in IP65 case
SY020/2-PRV5-D	Coil, pulse and reed switch input to 0 – 5V converter in din rail case



Fig 1: SY020 B (IP65 case)



Issue 2

Fig 2: SY020 bare board