

## Quad Signal Converter (QSC) - Part Numbering

### Inputs and Outputs the Same:

Part numbering for units where all four inputs and the four outputs are setup to be the same.

Remember that the first three outputs (1, 2 and 3) are loop powered and require loop power to operate – the loop voltage needs to be > 6 V and < 27 VDC.

For example Input = 4 x 0-10V, Output = 4 x 4-20 mA. Part numbering for units with different inputs and outputs see the next section.

GB-QS/4kg-4nt/p (15)      Quad Signal Converter  
 Input:  
 Outputs:                    (assumes all outputs are the same, see  
    below if this is not the case)  
 Auxiliary Supply:

k -      signal input type: I = current DC, V = voltage DC, L = loop powered current input (limited selection available - only 0-20 or 4-20 mA)

g -      input signal range

*current (k=I):*

- A = 4 - 20 mA
- B = 0 - 20 mA
- C = ±5.5 mA
- D = 0 - 1 mA
- E = 0 - 5 mA
- F = 0 - 50 mA
- G = ±5.0 mA
- H = ±150 mA
- J = 0 - 60 mA
- K = 0 - 10 mA
- L = 0 - 200 mA
- M = 0 - 1 A
- N = 0 - 5 A
- P = 0 - 10 A
- Q = 0 - 15 A

*voltage (k=V):*

- A = 0 - 10 V
- B = 0 - 50 mV
- C = ±50 mV
- D = 0 - 5 V
- E = ±5 V
- F = 1 - 5 V
- G = ±10 V
- H = 0 - 100 mV
- I = 0 - 150 mV
- J = ±150 mV

- K = 0 - 1 V
- L = 0 - 20 V
- M = 0 - 30 V
- N = ±200 mV
- O = ±20 V
- P = ±1.25 V
- Q = 0 - 60 mV
- R = ±1.5 V
- S = 0 - 200 mV
- T = 0 - 15 V
- U = ±20 mV
- V = ±100 mV
- W = ±50 V
- X = 0 - 3 V
- Y = 0 - 100 V
- AA = 0 - 800 mV
- AB = ±400 mV
- AC = 0 - 1300 mV
- AE = 0 - 50 V
- AF = ±75 mV
- AG = 0 - 24 V
- AK = ±100 V
- AM = 0 - 60 V
- AN = 0 - 12 V
- AO = 0 - 30 mV
- AQ = 0 - 74 V

n -      output signal type : I = current    V = voltage

t - output signal range

*current (n=I):*

A = 4 - 20 mA

B = 0 - 20 mA

D = 0 - 1 mA

E = 0 - 5 mA

F = 20 - 4 mA

*voltage (n=V):*

A = 0 - 10 V

D = 0 - 5 V

E =  $\pm 5$  V

F = 1 - 5 V

G =  $\pm 10$  V

K = 0 - 1 V

**Output configuration letters: nt** [website offering as Output\_1/2/3 with purple colours]

n - output signal type : I = current V = voltage

t - output signal range

current ( $n=I$ ):

A = 4 - 20 mA

B = 0 - 20 mA

D = 0 - 1 mA

E = 0 - 5 mA

F = 20 - 4 mA

voltage ( $n=V$ ):

A = 0 - 10 V

D = 0 - 5 V

E =  $\pm 5$  V

F = 1 - 5 V

G =  $\pm 10$  V

K = 0 - 1 V

**Auxiliary power supply:**

p - C = 24 VDC,

D = 12 VDC

E = 9 - 18 VDC (nominally 12 VDC)

G = 18 - 36 VDC (nominally 24 VDC)

H = 36 - 72 VDC (nominally 48 VDC)

We also have mains powered versions:

p - A = 90-264 VAC (47-63 Hz) or 120-370 VDC

## Inputs and Outputs Different:

In the cases where there is a mixture of input and output requirements, we use a serialized numbering system to cater for the very many permutations possible. We will allocate a unique configuration number for each configuration.

GB-QS/Mxxxxxx/p (15)

xxxxxx - configuration number (six digits) starting at 000001

p – auxiliary power supply as above

**GB-QS/M000001/A Phasecon – 2014/2015**

Input 1: 0-10 V - half wave rectified at 300 Hz

Output 1: loop powered 4-20 mA

Relay 1: trip point adjustable from 0 to 11 VDC

Input 2: 0-50 mV DC – from current shunt 2000A:50mV

Output 2: loop powered 4-20 mA

Relay 2: trip point adjustable from 45 to 55 mV

Input 3: 4-20 mA – from controller

Output 3: loop powered 4-20 mA

Relay 3: not installed

Input 4: 4-20 mA – from controller

Output 4: 0-5 V

Relay 4: not installed

**GB-QS/M000002/A Phasecon – 2016**

Input 1: 0-15 V – pulse width modulated input at 22 V peak at 43 KHz

Output 1: loop powered 4-20 mA

Relay 1: trip point adjustable from 0 to 11 VDC

Input 2: 0-50 mV DC – from current shunt 2000A:50mV (pulse width modulated input at 43 KHz)

Output 2: loop powered 4-20 mA

Relay 2: trip point adjustable from 45 to 55 mV

Input 3: 4-20 mA – from controller

Output 3: loop powered 4-20 mA

Relay 3: not installed

Input 4: 4-20 mA – from controller

Output 4: 0-5 V

Relay 4: not installed

**GB-QS/M000003/G      Motornostix – 2017**

Input 1: 0-1 VDC  
Output 1: loop powered 4-20 mA  
Relay 1: not installed

Input 2: 0-1 VDC  
Output 2: loop powered 4-20 mA  
Relay 2: not installed

Input 3: 0-1 VDC  
Output 3: loop powered 4-20 mA  
Relay 3: not installed

Input 4: 0-1 VDC  
Output 4: loop powered 4-20 mA  
Relay 4: not installed

Auxiliary Supply: 18 – 36 VDC