AUTOMATION WORKS NZ LTD BCS-10 PULLCORD SWITCH

The BCS-10 Pullcord switch has been designed to provide 3-wire stop/start control.

This is achieved via 2 switch contacts:

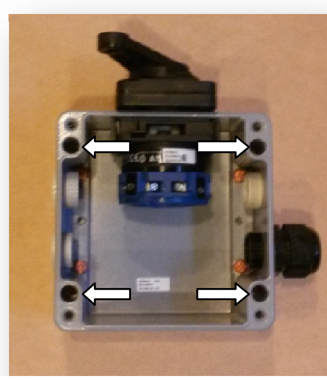
- A single pole latching contact that will change its state with each cycle of the switch handle.
- A single pole momentary contact, that is timed to turn on simultaneously with the latching contact turning on.

The BCS-10 switch can be installed to carry out functions other than 3-wire stop/start by utilizing the contacts above in a different way, for example using only the latching contact to give a PULL ON / PULL OFF control.

1. Switch Mounting

BCS-10 switches are have 4 through holes in the rear housing provided for switch mounting.

These holes will accept fasteners up to 7mm in diameter, with a head size of up to 11mm.



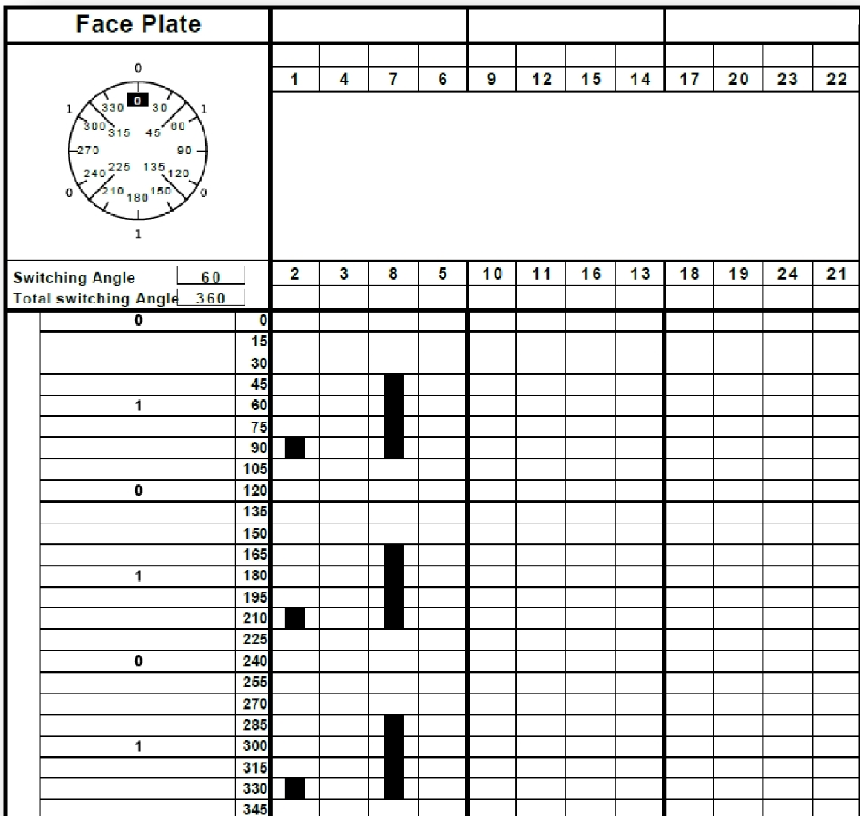
2. Electrical Connection

The BCS-10 switch features a removable contact block to allow electrical connections.

Contacts 1-2 provide the momentary contact (in place of a start button in a 3-wire stop/start circuit.

Contacts 7-8 provide the latched contact (in place of a stop button in a 3-wire stop/start circuit.

The following diagram shows when the contacts make during the switch cycle.



3. Switch Ratings and Specifications

The following data is the switch manufacturers ratings and specifications.

IEC 60947-3 EN 60947-3, VDE 0660 Teil 107

Rated insulation voltage Ui

Voltage (V)	AC / DC
690	AC / DC

Rated impulse withstand voltage Uimp

Voltage (kV)	Overvoltage category	Pollution degree	Supply system	Function
6	III	3	Valid for lines with grounded common neutreal termination	switch

Conventional enclosed thermal current Ithe

Current (A)	Ambient temperature (°C)	Peak temperature (°C)	Additional requirements	No. of stages (from - to)	Mounting	Mounting size
20	35	40	Ambient temperature +35°C during 24 hours with peaks up to +40°C	--		

Rated operational current Ie

Utilization category	Voltage (V)	Current (A)
AC-15	220-240	6
AC-15	380-440	4
AC-20A	690	20
AC-21A	690	20
AC-22A	220-500	20
AC-22A	660-690	16

Rated operational power

Utilization category	Voltage (V)	No. of phases	No. of poles	Power (kW)
AC-2	220-240	3	3	4,00
AC-2	380-440	3	3	7,50
AC-2	500-500	3	3	10,00
AC-2	660-690	3	3	10,00
AC-3	220-240	3	3	3,00
AC-3	380-440	3	3	5,50
AC-3	500-500	3	3	5,50
AC-3	660-690	3	3	5,50
AC 3	110 110	1	2	0,60
AC-3	220-240	1	2	2,20
AC-3	380-440	1	2	3,00
AC-4	220-240	3	3	0,55
AC-4	380-440	3	3	1,50
AC-4	500-500	3	3	1,50
AC-4	660-690	3	3	1,50
AC-4	110-110	1	2	0,15
AC-4	220-240	1	2	0,25
AC-4	380-440	1	2	0,55
AC-23A	220-240	3	3	3,70
AC-23A	380-440	3	3	7,50
AC-23A	500-500	3	3	7,50
AC-23A	660-690	3	3	7,50
AC-23A	110-110	1	2	0,75
AC-23A	220-240	1	2	2,20
AC-23A	380-440	1	2	3,70

UL60947-4-1 , UL508

Nominal Voltage

Voltage (V)	AC / DC
600	AC

Rated insulation voltage Ui

Voltage (V)	AC / DC
600	AC

Rated thermal current

Current (A)	Ambient temperature (°C)	Additional Text
10	0-40	

GENERAL TECHNICAL INFORMATION

Tightening torque of screws

tightening torque (Nm)	tightening torque (lb-in)
0,80	7

Stripping length

Length (mm)	--
8	STRIPPINGLENGTH

Mechanical life

No. of operations	Ambient temperature (°C)	Number of stages
1000000	-5-55	--

Electrical life

Utilization category	cos(φ)	Time constant (ms)	Voltage (V)	Current (A)	No. of operations	number of series contacts	AC/DC	No. of phases	No. of poles
	0,59	--	122	10	150000	1	AC	1	1
	0,59	--	220	10	100000	1	AC	1	1
	0,59	--	220	15	50000	1	AC	1	1
	0,64	--	220	20	30000	1	AC	1	1

Recommended screw driver

Type of screw driver	Size	Head dimensions
Cross Screwdriver	PH1	
Slotted Screwdriver	0,8x1	

Degree of protection

IP - Code switch terminal
IP10

General Information

Text
DC switching capacity applies to ON/OFF switches.
Do neither lubricate nor treat contacts.
Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.
Use copper wire, only.
Terminals with factory fitted jumper links, are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.
Use only fully insulated cable lugs resp. FASTON receptacles.
After installation of the switches the spacings between the terminals must be sufficient to fulfill the requirement of the applicable standards.

Operating temperature

Min. Temperature [°C]	Max. Temperature [°C]
-5	60