TCS

overview

- **under speed control with fault latching function**
- **SPCO output max. 6A**
- **input PNP 24Vdc, volt free contact and 15-40Vdc**
- **start surge delay 0.2-20s**
- **4 selectable speed ranges**
- **LED indicators for power supply, relay and reaction timer**
- **45mm DIN rail mount housing**

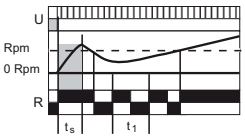


Function

Control relay active / Control relay passive
Contact closed / Contact open

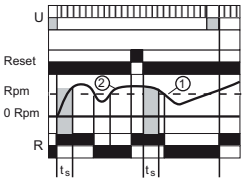
① Underspeed threshold
② Monitored speed
ts... Start surge delay

Auto Reset



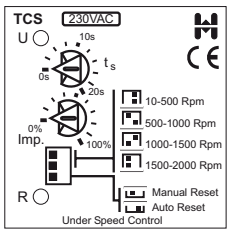
Control relay to monitor under speed
On application of the supply voltage the output relay energises and the timing period **ts** starts. The TCS monitors the time between the leading edge of successive input pulses. When the timing period between the pulses exceeds the set value, the output relay drops out.

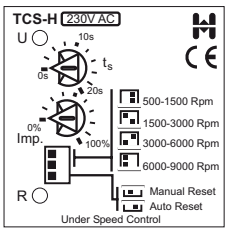
Manual Reset

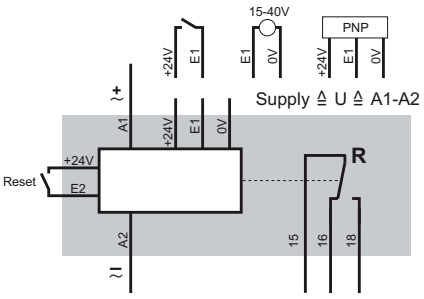


Auto Reset
When the timing period between the pulses returns to the acceptable range for three successive pulses the output relay resets.

Manual Reset
The output relay resets when terminals +24 and E2 are connected. After breaking the connection time **ts** starts.







specification

supply voltage variation		nominal voltage +10% / -20%
frequency range		48 - 63 Hz
duty cycle		100%
range	**TCS**	10-2000 Rpm
	TCS-H	500-9000 Rpm
start surge delay		0 - 20 s
output relay specification		max. 6A 230V~
Ue/Ie	AC-15	120V/5A 240V/4A
Ue/Ie	DC-13	24V/3A
expected life time		DPCO SPCO
mechanical		2×10^6 resp. 1×10^7 operations
electrical		1×10^5 resp. 1×10^5 operations
screws		pozidrive 1
screw tightening torque		0,6..0,8Nm
operating conditions		-20 to +60°C non condensing

* EN 60947-5-1 VDE 0435

ordering information

part no	supply		output	sup. galv. iso*	cULus	housing types
TCS 230Vac	230V~	2,5VA	SPCO	yes	-	C
TCS 115Vac	115V~	2,5VA	SPCO	yes	-	C
TCS 24Vdc	24V=	2W	SPCO	no	-	C
TCS-H 230Vac	230V~	2,5VA	SPCO	yes	-	C
TCS-H 115Vac	115V~	2,5VA	SPCO	yes	-	C
TCS-H 24Vdc	24V=	2W	SPCO	no	-	C

* The measurement input is galvanically isolated from the power supply

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