

TECH NOTES





For driving the RotaStep or SRA Clutch/Brake Units

JAWZ Features Include:

- Start and stop signal suppression
- ♦ Programmable signal inputs: edge sensitivity, NPN/PNP signals
- ♦ Free Mode
- ♦ 22 Vdc output
- ♦ 12 Vdc output
- ♦ Status ouput

Function Description

Start / Stop, Start Inhibit / Stop Inhibit

Start: A signal supplied at the Start input turns the Clutch output on, and the brake output

Stop Inhibit: When Stop Inhibit is active, signals supplied at the Stop Input are ignored

Stop: A signal at the Stop input turns the Brake output on, and the Clutch output off

Start Inhibit: Start signals are ignored as long as Start inhibit is active

Free mode / Brake mode

Free: Activation of Free mode turns both valve driver outputs off. The output shaft of the

RotaStep/SRA unit can then rotate freely. When Free mode is deactivated, the condition of the

valve driver output is determined by the latest activated input mode.

Brake: Activation of Brake mode turns on the Brake output, and start signals are ignored

Input Terminals

Terminal

Functions

TB1-4	Brake Mode	Sets the RotaStep/SRA unit in brake mode.
TB1-5	Free Mode	Inhibits driver signals and enables the output shaft to rotate freely.
TB2-9	Start Inhibit	Suppresses the start signal.
TB2-11	Start	Activates the clutch valve driver output.
TB2-12	Stop Inhibit	Suppresses the stop signal.
TB2-14	Stop	Activates the brake valve driver output.

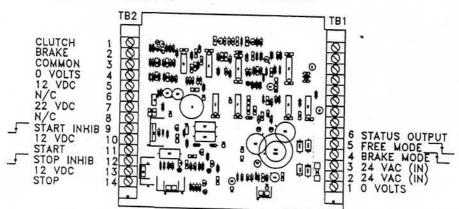
Output Terminals

Terminal

Functions

TB1-1, TB2-4	0 V d.c.	0 V d.c. reference. DO NOT CONNECT TO EARTH I
TB2-1	Clutch	Driver output for clutch solenoid valve.
TB2-2	Brake	Driver output for brake solenoid valve.
TB2-3	BR/CL	Connection to the common point of the solenoid valves. DO NOT CONNECT TO 0V d.c. OR EARTH!
TB2-5, TB2-10	ř.	
TB2-13	12 V d.c.	12 V d.c. reference.
TB2-7	22 V d.c.	22 V d.c. reference.

JAWZ TERMINAL CONNECTIONS



AC Inputs

Terminal

Transformer Connections

Pin	1	-	Ground
Pin	2	_	Line

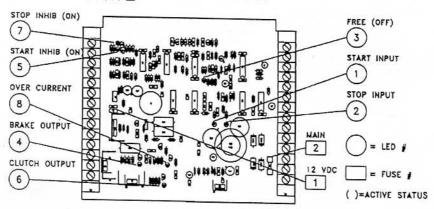
Pin 3 - Neutral

115 VAC Operation: Connect AC to pins 1 & 4 of the Transformer. Jumper pins 1 & 2, 3 &

230 VAC Operation: Connect AC to pins 1 & 4 of Transformer. Jumper pins 2 & 3. Default on AC input is 115 VAC.

Indicators

JAWZ LED & FUSE LOCATIONS



LED

Status Lights

Led 1 (ds1)	Start Input: Light is normally off. Goes on when start signal is applied to TB2-11. If JP2 is
	set for positive, light is normally on, and when a start is applied to TB2-11, light shuts off.
Led 2 (ds2)	Stop Input: Light is normally off. Goes on when stop signal is applied to TB2-14. If JP4 is
	set for positive, light is normally on, and when a stop is applied to TB2-14, light shuts off.
Led 3 (ds3)	Free Led Off (Free Mode): Light is normally on; light shuts off when input TB1-5 is low.
	NOTE: WHEN FREE MODE IS ENABLED, DS4 AND DS6 ARE OFF.
Led 4 (ds4)	Brake Mode: When DS4 is lit, system is in brake mode.
Led 5 (ds5)	Start Inhibit: DS5 is normally off. Light comes on when start inhibit is enabled.
Led 6 (ds6)	Clutch Mode: When DS6 is on, system is in clutch mode.
Led 7 (ds7)	Stop Inhibit: DS7 is normally off; DS7 goes on when stop inhibit is enabled.
Led 8 (ds8)	Over Current: DS8 is normally off. DS8 will light up if valve outputs are short circuited.

Jumper Settings

		Jur	nper Settings		
Jum	per Function	Default	E 1971		
JP1	Start NPN/PNP Select 1-2 NPN 2-3 PNP	NPN – Pos 1-2	JAWZ	JUMPER LOCATIONS & SETTING JP1 O PNP O START O NPN O NPN	JP6
JP2	Start Edge select 2-3 Negative Edge 1-2 Positive Edge	Negative Pos 2-3	* SRA=2X2 ROTASTEP=2X1 JP7 • O-O O 2X2 2X1 VALVE #	60 600 00 00 00 00 00 00 00 00 00 00 00	JP4 O POS O STOP NEG
JP3	Stop NPN/PNP Select 1-2 NPN 2-3 PNP	NPN-Pos 1-2	VALVE # 10 10 10 10 10 10 10 10 10 10 10 10 10		JP5 PULSE O INPUT O LEVEL O START JP2 O POS
JP4	Stop Edge Select 1-2 Negative 2-3 Positive	Negative Pos 1-2	Ŀ	سي ۲۰۰۰	

continued...

Jumper	Function	on	Defa	ault			
. , JP5	Level or 1-2 Leve 2-3 Pulse		Pulse	e Pos 1-2			
JP6	Anti-Jam stop sigr	n – When this jum nal has not been r	per is eceive	installed, an internal sto ed within 250 milli secor	op signal will b nds of a start s	e generated if a ignal.	an external
JP7		elect es – SRA units es – RotaStep	2x2 l	Pos 1-2			
				Technical Data	(4000)		
Valve Driver	·	37V Pulse width mod 8.5 ± 15% average V O.E. 6±1 ms			Status Output Voltage Outpu	uts 12 VD	max current 100 mA C ± 10% 500 mA Max C ± 10% 100 mA Max
Signal Input	s	High: 16 - 30 VDC Low: < 2 VDC			Fuse	4 AMF	:
Commence of the second of the				Your Notes			
	,		L				NI PARIS
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				anna marana anna anna anna anna anna ann
			•••••••••••••••••••••••••••••••••••••••				annanan mananan manana
							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>		
			.,				Management of the state of the

