

Suggested setup parameters for IMO Jaguar Cub (STV) "Simplified Torque Vector"

Cub Functions Group	Nr.	Description General	Factory Setting	Suggested Setting	Actual Setting	Suggested Setting Description
1.F	F 01	Speed Ref source	4			Speed ref by: 4 = fascia potentiometer , 0=up/down keys on keypad, 1=Pot or 0-10V control 2=4-20mA control, 3 = 0-10v & 4-20mA summed together (trim?)
	F 02	Control Method	2	1		2 = Control from Keypad RUN (forwards) & STOP, 1=Control by terminals FWD & REV.
	F 03	Max Frequency	50Hz			Sets maximum output speed (Hz) for 10V or 20mA ref input
	F 04	<i>Base Frequency</i>	<i>50Hz</i>			<i>Motor rated nominal frequency (normally 50Hz) for nominal voltage rating</i>
	F 05	<i>Rated Voltage</i>	<i>230V / 400V</i>			<i>Motor rated nominal voltage (at Base Frequency)</i>
	F 07	Accel Time 1	6.00s			Time taken from zero to max frequency
	F 08	Decel Time 1	6.00s			Time taken from max freq to zero speed
	F 11	Overload Level	Default for motor			Normal overload setting - usually nameplate motor Amps
	F 15	High limit	70Hz			Sets high speed limitation - ensure this doesn't impede max freq unless needed
	F 16	Lo Limit	0Hz			Sets Low speed limitation
	F 18	Freq Bias	0Hz			Sets Min Speed or o/p freq for 0V or 4mA (biased o/p)
	F 20	DC inj Hz	0			Sets frequency during ramp down for DC to come on
	F 21	DC inj level	0			Sets level of DC (% of Jaguar o/p rating)
	F 22	DC inj time	0			Sets duration time of DC injection
	F 26	Motor sound	15	4		Reduces heat in panel unless super quiet motor essential
F 37	Load Selection	1	2	2	0 = energy saving, 1=CT (set F 09), 2 = AUTO (poss best setting if P02,P03 set)	
1.E	E 01 - 03	X terms function	0,7,8			Programs X terminals as function required e.g. presets (0,1,2), 3-wire (6),ramps, hand/auto etc
	E 20, 27	Y terms function	0, 99			Programs Y1E & 30ABC relay as req'd e.g. RUN, TRIP, At Speed etc
	E 52	Menu Display select	0	2		0 = Programme Menu only (1.F to 1.Y), 1 = 2.rEP menu only (displays parameters adjusted from default settings, 2 = all available (Programme Menus 1 through to 6)
1.C	C 05-11	7 Preset speeds	0.00Hz			When using X inputs to call for preset speeds
1.P	P 02	<i>Motor Capacity</i>	<i>Motor kW</i>	?		<i>Motor nameplate rated power kW</i>
	P 03	<i>Motor rated Amps</i>	<i>Default for motor</i>	?		<i>Motor nameplate rated Full Load Current in amps</i>
	P 14	<i>No load Amps</i>	<i>Default for motor</i>			<i>Vector info - if N/A, contact IMO or use default if close</i>
	P 09	<i>Slip compensation</i>	<i>0</i>	<i>100%?</i>		<i>Set as a % of typical factory motor - increase for more speed under load</i>
1.H	H 06	Fan Stop	0	1		On/off control of fan with temperature may lengthen fan bearing life
	H 07	ACC PTN	0			0 = normal linear ramp, 1 = S ramp (weak), 2 = S (strong), 3 = curvilinear (fan)
	H 95	DC response	0	1		0 = slow response for DC injection braking, 1 = fast
1.J	J 01	PID Control	0			0 = Inactive, 1 = Positive (forward, 'heating') mode, 2 = inverse (reverse, 'cooling')
	J 02	Process Command	0			0 = Keypad, 1 = Process Command 1(see E60,E61,E62), 4= by communications
	J 03	P Gain	0.100	0.50-1.00		Proportional gain (increase for more response)
	J 04	I time (s)	0.0	2 - 3s		Integration time (decrease for more response)
	J 05	D time (s)	0.00			Derivative time (increase for more response)

Notes:in 3-wire, ensure common feed (PLC) to RUN (FWD) P/B is through STOP P/B