



LX449

Parameter list
Product version V1.5.8.2

PARAMETER LIST I

Software settings					
Parameter		Default settings	Custom settings	Min. value	Max. value
<i>Stability</i> (1/1)	<i>Build-up Gain</i>	2x		0.1x	14x
	<i>Loop Gain</i>	0.100x		0.022	1.000
<i>Buildup</i> (1/1)	<i>Initial voltage</i>	37.5%		0 %	67.5 %
	<i>Build-up Time</i>	5 Sec		1 Sec	60 Sec
<i>Protections</i> (1/1)	<i>Excitation loss</i>	ON		Off	On
	<i>Phase loss</i>	ON		Off	On
	<i>Current loss</i>	ON		Off	On
	<i>Stop at fault</i>	OFF		Off	On
<i>Analog Input 1</i> (1/2)	<i>Voltage Match</i>	OFF		Off	On
	<i>Cosphi infl.</i>	OFF		Off	On
<i>Analog Input 2</i> (2/2)	<i>Cosphi infl.</i> ⁽¹⁾	OFF		Off	On
<i>Analog Output</i> (1/1)	<i>Analog Output</i> ^{(1) (2)}	Output OFF		Options: Output off PID Output UVW (V) I-v (A) Cosphi Freq. (Hz) I-Exc. (A) UVW SP(V) Cosphi SP General SP 5Vdc 10Vdc I-v SP(A)	
<i>Regulation mode</i> (1/1)	<i>INV mode</i>	OFF		Off	On
	<i>VPH mode</i>	OFF		Off	On
	<i>Min. Excitation mode</i>	OFF		Off	On
	<i>Reset to defaults?</i>	NO		No	Yes
<p>⁽¹⁾ AVR Assistant required. Other settings can also be changed with AVR, see advanced settings (page 5,6,7).</p> <p>⁽²⁾ Do not use. (Only manufacturer)</p> <p>⁽³⁾ Only available in OEM access level. (Contact manufacturer for more information)</p>					

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Software settings						
<i>Parameter</i>		<i>Default settings</i>	<i>Custom settings</i>	<i>Min. value</i>	<i>Max. value</i>	
<i>Calibration (1/2)</i>	⁽³⁾ <i>Exc Offset</i> ⁽¹⁾	<i>0</i>		-127	127	
	<i>Exc Gain</i> ⁽¹⁾	<i>0.0 %</i>		-12.7 %	12.7 %	
	<i>U Offset</i> ⁽¹⁾	<i>0</i>		-127	127	
	<i>U Gain</i> ⁽¹⁾	<i>0.0 %</i>		-12.7 %	12.7 %	
<i>Calibration (2/2)</i>	⁽³⁾ <i>I(u) Offset</i> ⁽¹⁾	<i>0.0</i>		-12.7	12.7	
	<i>I(u) Gain</i> ⁽¹⁾	<i>0.0 %</i>		-12.7 %	12.7 %	
	<i>Analog In-Zero</i> ⁽¹⁾	<i>-1</i>		-127	127	
	<i>Analog In-Span</i> ⁽¹⁾	<i>-0.1 %</i>		-12.7 %	12.7 %	
	<i>PF offset</i> ⁽¹⁾	<i>0</i>		-127	127	

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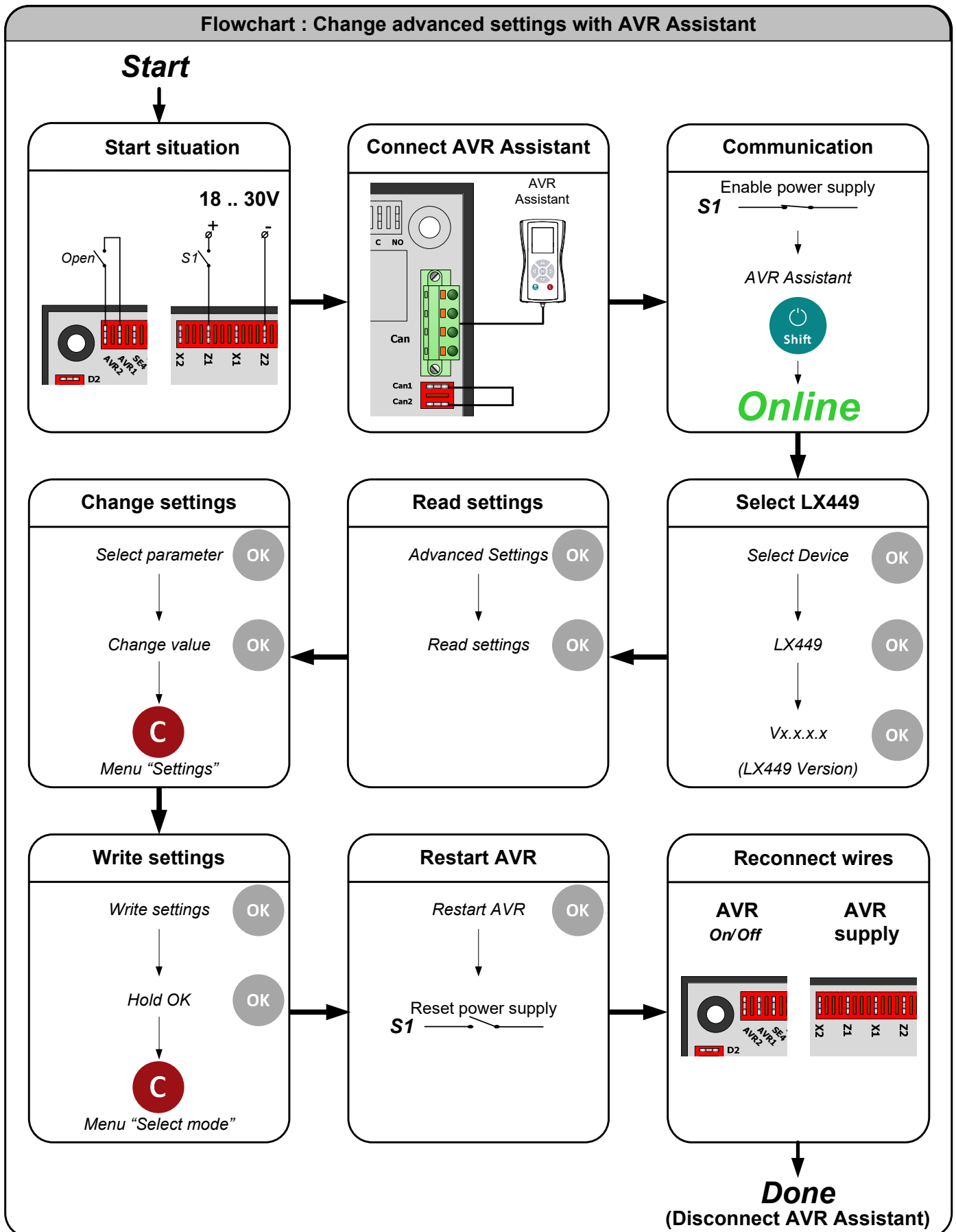
⁽³⁾ Only available in OEM access level. (Contact manufacturer for more information)

PARAMETER LIST I I I

Hardware settings		
<i>Parameter</i>	<i>Default settings</i>	<i>Custom settings</i>
<i>Rotary switch</i>	<i>M-Select</i>	<i>Position : 0</i>
	<i>I-Limit</i>	<i>Position : 9</i>
<i>Potentiometer</i>	<i>Voltage coarse</i>	<i>+/- 50% (adjusted: 400V/50Hz)</i>
	<i>Voltage fine</i>	<i>50 %</i>
	<i>Prop. gain</i>	<i>50 %</i>
	<i>Int. time</i>	<i>50 %</i>
	<i>Droop</i>	<i>0 %</i>
	<i>Cosphi</i> <i>Steepness</i> ⁽⁴⁾	<i>50%</i>
	<i>Excitation ceiling</i> <i>Cap. limit</i> ⁽⁴⁾	<i>100%</i>
	<i>Acc-range</i> <i>Min. exc φ</i> ⁽⁴⁾	<i>0%</i>
<i>Terminals</i>	<i>AVR1-AVR2</i>	<i>Linked</i>
	<i>SE1-SE2</i>	<i>Linked</i>
	<i>SE3-SE4</i>	<i>Linked</i>
	<i>S-T</i>	<i>Linked</i>
	<i>CAN1-CAN2</i>	<i>Linked</i>
	<i>TH1-TH2</i> ⁽⁴⁾	<i>Linked</i>
	<i>PF1-PF2</i> ⁽⁴⁾	<i>Open</i>
⁽⁴⁾ <i>Function can be changed with software settings.</i>		

ADVANCED SETTINGS I

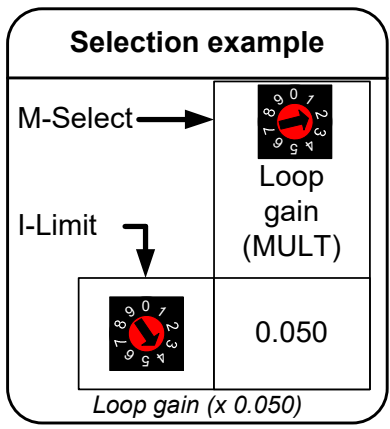
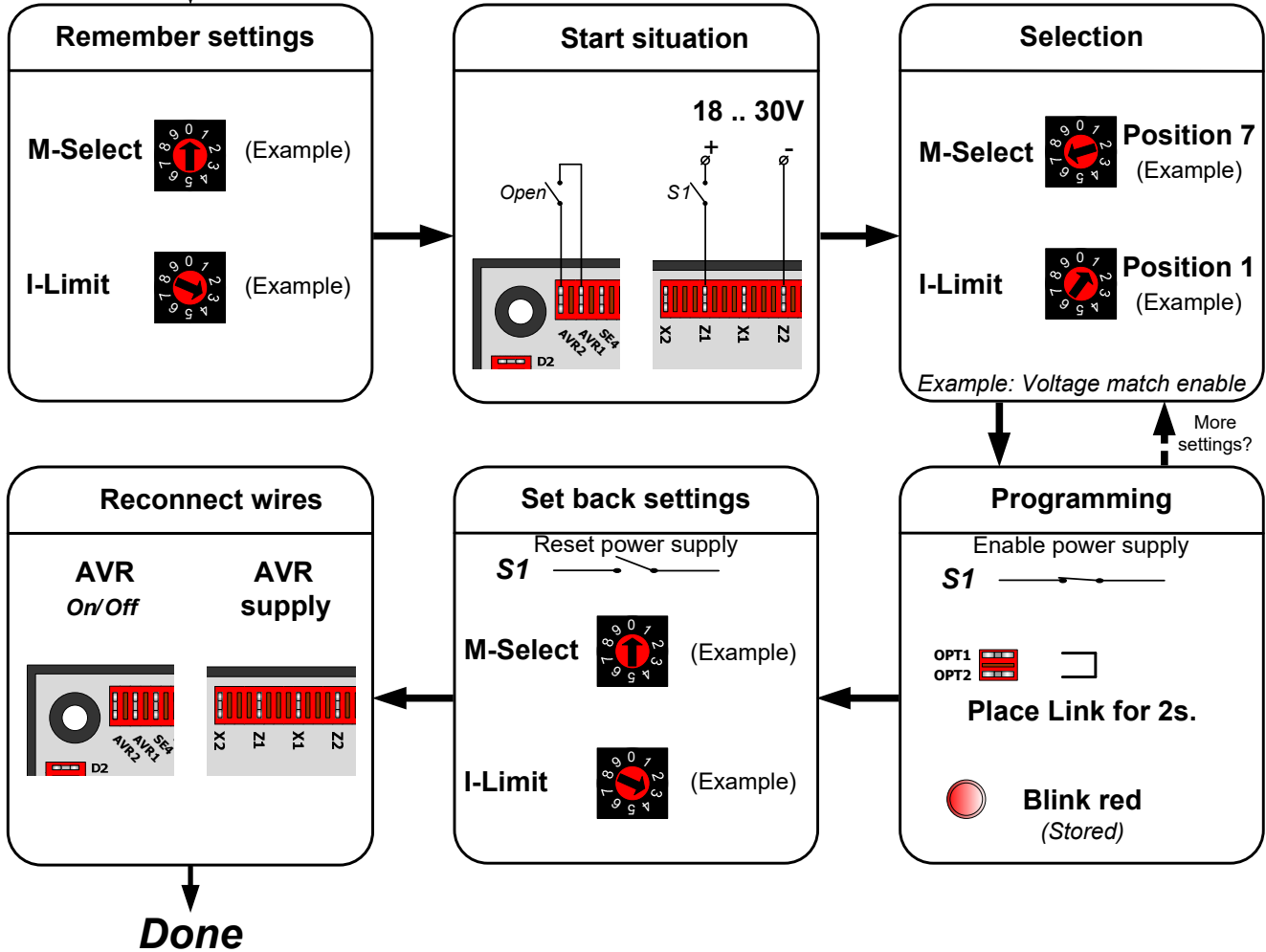
Flowchart : Change advanced settings with AVR Assistant



ADVANCED SETTINGS I I

Flowchart : Change advanced settings with rotary switches

Begin (Generator stopped !)





















Note

Change of setting only take effect after restart

Advanced settings can be adjusted according the flowchart.
Advanced settings are available with firmware version 1.2 and higher.

ADVANCED SETTINGS I I I

Table : Change advanced settings with rotary switches

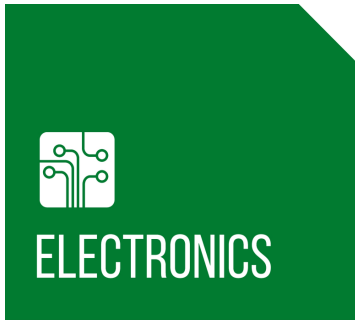
<i>M-Select</i>									
	 Buildup gain (MULT)	 Loop gain (MULT)	 Initial voltage, SE Mode.	 Protections	 Buildup time @ startup	 Option output	 Accessory input modes	 Operation modes	
<i>I-Limit</i>									
	0.1 (slowest)	1.000 (fastest)	0%	Excitation loss disabled	1 sec.	Do not use *	Voltage match disabled	Inverted output disabled	
	0.2	0.200	10%	Excitation loss enabled	3 sec.		Voltage match ** enabled	Inverted output enabled	
	0.5	0.100	15%	Phase loss disabled	5 sec.		Cosphi setpoint disabled	Do not use *	
	1	0.066	22.5%	Phase loss enabled	7 sec.		Cosphi setpoint enabled		
	2	0.050	30%	Current loss disabled	10 sec.		Do not use *	VPH Mode disabled	
	4	0.040	37.5%	Current loss enabled	20 sec.			VPH Mode enabled	
	6	0.033	45%	Do not use *	30 sec.			Min. Exc. at Cosphi disabled	
	8	0.028	52.5%	Do not use *	45 sec.			Min. Exc. at Cosphi enabled	
	10	0.025	60%	Exc. stop after error disabled	60 sec.			Do not use *	
	14 (fastest)	0.022 (slowest)	67.5%	Exc. stop after error enabled	Cosphi setpoint 0..255 sec.				
Description	Extra multiplication factor for proportional gain. Only applied during field flash.	Extra multiplication factor for proportional gain.	Initial setpoint from which the AVR ramps up after field flash. Setpoint in % of Unom.	Enable or disable the required protections.	The speed by which the AVR ramps from the minimum setpoint to the nominal setpoint.	Special application		Enable or disable the required modes of operation	Enable or disable the required modes of operation

* Do not use. (Only manufacturer)

** LX_VMA unit required.

Default factory settings are highlighted in table. By setting both M-Select and I-Limit at position 9 and placing the programming jumper, will reset the AVR to **default factory settings**.

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