

## DCU 305 R3 LT Engine Control Unit

Part#: 1006420

Rev. October 8, 2015

### Interfaces

Section	Ch.	Cond.	Min	Typ	Max	Unit	Comment
Power Supply, Vcc	2	@ 24 VDC	18 -	24 0.5	32 2	VDC A	Max ripple 10% without exceeding Min and Max values.
Switch/binary Input	1-6 7-12	Low = <2 Low = <12	-	0	-	VDC	Inputs are active when low. Open circuit to deactivate.
4-20 mA Input	5		0	4-20	25	mA	Accuracy: +/- 0.5 % of range
Switch/binary Output	4		- 0	Vcc-0.5 -	- 0.2	V A	Power supply - 0.5 V Current consumption
Relay Output	2		0	-	1	A	Potential free
MPU/Pickup	2		0.1 4	5 32	10 32	kHz Vpp	Magnetic pickup
Configuration or Modbus RTU	1		-	9600	-	baud	8 data bits, 1 stop bit, even parity
I/O Expansion	1		-	-	-	-	AK-6 and/or MK-14 expansion

### Screen

Section	Conditions	Width	Typ	Height	Unit	Comment
Size	-	-	5.6"	-	inch	
Resolution	-	240	-	128	px	50 PPI
	Conditions	X	Typ	Y	Unit	Comment
Viewing angle	-	+67 -67	0	+62 -67	Deg.	X=horizontal, Y=vertical Contrast ratio >10:1

### Measurements and Weight

Section	Weight	Width	Height	Depth	Unit	Comment
Size	-	260	160	35	mm	
Cut-out	-	230	146	-	mm	Access depth: 60 mm
Mounting holes	-	248	148	-	mm	Centre to edge 6 mm Diameter 3,5 mm
Weight, DCU 305 main panel only	1.6	-	-	-	kg	
Weight, RK-66 wire terminal unit	1.0	-	-	-	kg	

### Environmental

Section	Condition	Min	Typ	Max	Unit	Comment
Vibration	Operational	-	0.7	-	g	IEC 60068-2-6 Fc
Operating Temperature	Operational	0	-	50	C	IEC 60068-2-1 Ab/Ad
Storage Temperature	Not powered	-20	-	+60	C	
Dry Heat	Operational	-	-	50	C	IEC 60068-2-2 Bb/Bd
				16	hours	
Damp Heat, cyclic	Cyclic 20-55-20	-	-	-	C	IEC 60068-2-30 Db
	Humidity 95%	-	-	-	-	
	Duration	-	-	48	hours	

# Datasheet



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Section	Condition	Min	Typ	Max	Unit	Comment
Enclosure	Operational	-	IP44	-	-	Front panel
High Voltage	Not powered	-	-	548	Vrms	Voltage applied between <i>clamped</i> supply and shield.
Fast low-energy Transients/bursts	Operational	-	-	-	-	IEC 61000-4-4
		-	-	2	kV	24 VDC supply lines, 5 kHz
Slow high-energy Transients/surges	Operational	-	-	1	kV	Signal lines, 5 kHz
		-	-	-	-	IEC 61000-4-5
Electrostatic Discharge, ESD	Operational	-	-	0.5	kV	24 VDC supply lines
		-	-	1	kV	Signal lines
Electrostatic Discharge, ESD	Operational	-	-	-	-	IEC 61000-4-2
		8	-	8	kV	Air
		6	-	6	kV	Contact

### EMC

Section	Condition	Min	Typ	Max	Unit	Comment
Conducted emission	Operational	-	-	-	-	CISPR 16-1-1 / 16-1-2 / 16-2-1
Radiated emission	Operational	-	-	-	-	Quasi-peak at 3m:
		150	-	300	kHz	80-50 dB $\mu$ V/m
		0.3	-	300	MHz	50-34 dB $\mu$ V/m
		30	-	156	MHz	54 dB $\mu$ V/m
		156	-	165	MHz	24 dB $\mu$ V/m
		165	-	2 000	MHz	54 dB $\mu$ V/m
Radio frequency Immunity	Operational	-	-	10	Vrms	IEC 61000-4-6
Radiated electric Immunity	Operational	80	-	2 000	MHz	IEC 61000-4-3 10 V/m, 80% AM, 1 kHz

#### Validity of Information

Data valid at revision date. Auto-Maskin reserves the right to make improvements and changes of specification at any time.

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