



Product designation	Thyristor modules		
Product type designation	DCTL		
<b>General characteristics</b>			
Rated voltage	V	400	
Operating voltage range	340...440		
Rated frequency	Hz	50/60	
Operating frequency range	Hz	45...65	
Rated current (Ie)	A	22	
Step power at	400VAC	kvar	15
Peak inverse voltage (PIV)	VAC	1800	
Number of controlled phases	Nr.	2	
Control circuit	12-24VDC input or free-voltage input or via RS485 serial port (with optional card EXC1042 in combination with controller DCRG8F + EXP1012)		
<b>Auxiliary supply</b>			
Rated auxiliary supply voltage Us	AC		
	min	VAC	100
	Max	VAC	240
Auxiliary rated frequency	Hz	50/60	
Power consumption Max	VA	11.8	
Power dissipation Max	W	4.6	
<b>Control input</b>			
Terminals	CONTROL +/-		
Rated voltage	12-24VDC		
Operating range	8...30VDC		
<b>Digital inputs</b>			
Terminals	C-IN1		
Applied voltage at contact (internal)	5VDC		
Input current	mA	≤10	
Low input signal	VDC	≤0.8	
High input signal	VDC	≥3.2	
Input signal delay	ms	≥50	
<b>NTC probe input</b>			
Terminals	NTC-NTC		
Sensor type	NTC (ordering code NTC01)		

Measuring range	°C	-25...+85
Maximum connection length	mt	3
<b>Fan power supply</b>		
Terminals		FAN +/-
Supply voltage (internal)		5VDC (provided by DCTL)
Fan type		1 built-in fan type EXP8004
<b>Relay outputs</b>		
Number of relay output	Nr.	1
Contact arrangement		1 C/O-SPDT
Rated current		NO contact: AC1 5A 250VAC / 5A 30VDC NC contact: AC1 3A 250VAC / 3A 30VDC
UL/CSA and IEC/EN 60947-5-1 designation		D300
Maximum switching voltage	VAC	250
Electrical life (with rated load)	cycles	NO contact: 10x10 <sup>3</sup> NC contact: 20x10 <sup>3</sup>
Mechanical life	cycles	10 <sup>7</sup>
<b>Insulations</b>		
Rated insulation voltage Ui IEC/EN	V	480
Rated impulse withstand voltage Uimp	kV	4
<b>Connections - power terminals</b>		
Type of terminal		Fixed - double lock clamp
Conductor cross section		
	min	mm <sup>2</sup> 2 x 2.5
	Max	mm <sup>2</sup> 2 x 35
	min	AWG 2 x 18
	Max	AWG 2 x 2
Tightening torque (Max)		
	Nm	4-5
	lbin/lbft	2.95-3.69 lbft
<b>Connections - relay output</b>		
Type of terminal		Screw
Conductor cross section		
	min	mm <sup>2</sup> 0.2
	Max	mm <sup>2</sup> 4
	min	AWG 26
	Max	AWG 10
Tightening torque (Max)		
	Nm	0.8
	lbin	7
<b>Connections - fan and digital input</b>		
Type of terminal		Screw
Conductor cross section		
	min	mm <sup>2</sup> 0.2
	Max	mm <sup>2</sup> 2.5
	min	AWG 24
	Max	AWG 12

Tightening torque (Max)

Nm	0.44
lbin	4

Ambient conditions

Temperature

Operating temperature

min	°C	-20
max	°C	+45°C without derating (up to 55°C with derating)

Storage temperature

min	°C	-30
max	°C	+80

Relative humidity

% <80%

Maximum Pollution degree

2

Overvoltage category

III

Max altitude

m 2000m without derating

Climatic sequence

Z/ABDM (IEC/EN 60068-2-61)

Shock resistance

15g (IEC/EN 60068-2-27)

Vibration resistance

0.7g (IEC/EN 60068-2-6)

Housing

Execution

Internal panel version

Material

Polycarbonate

Mounting

Screw fixing or DIN-rail (IEC/EN 60715) with optional accessory EXP8003

Degree of protection

IP00

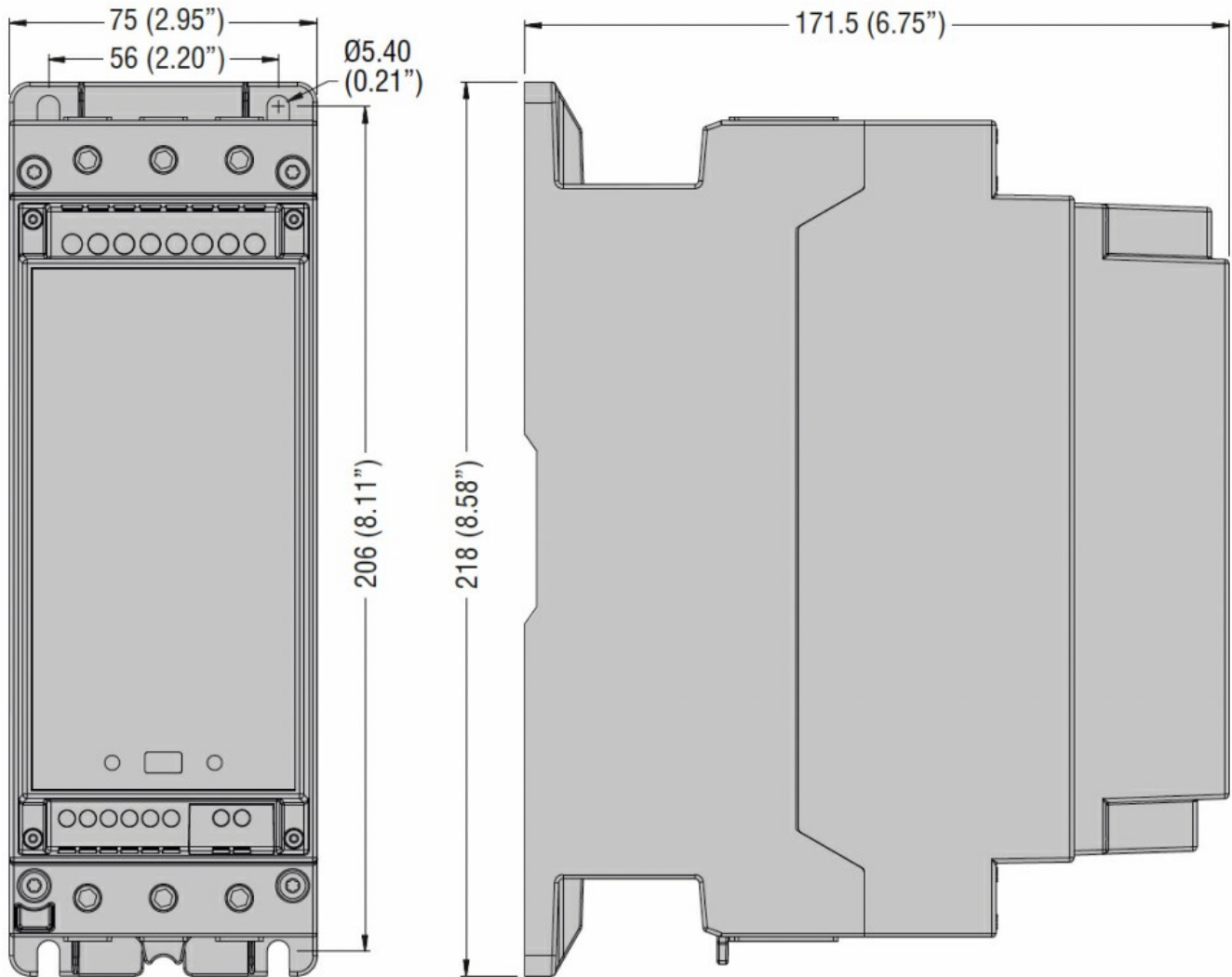
Dimensions (W x H x D)

mm 75 x 218 x 171.5

Weight

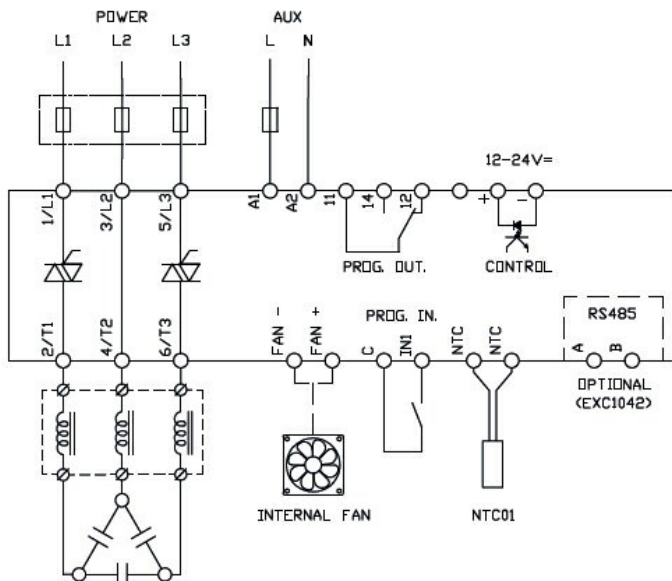
g 1740

Dimensions



Wiring diagrams

**DCTL**



Certifications and compliance

Compliance

IEC/EN 60947-4-3

IEC/EN 61000-6-2

IEC/EN 61000-6-4

Certificates

cULus

ETIM classification

ETIM 8.0

EC002055 -  
Solid state relay