

Product designation			Thyristor modules	
Product type designation			DCTL	
General characteristics				
Rated voltage		V	600...690	
Operating voltage range			340...759	
Rated frequency		Hz	50/60	
Operating frequency range		Hz	45...65	
Rated current (Ie)		A	48	
Step power at				
	400VAC	kvar	50	
	440VAC	kvar	37	
	480VAC	kvar	40	
	525VAC	kvar	44	
	600VAC	kvar	50	
	690VAC	kvar	50	
Peak inverse voltage (PIV)		VAC	3600	
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)	
Auxiliary supply				
Rated auxiliary supply voltage Us				
AC				
	min	VAC	100	
	Max	VAC	240	
Auxiliary rated frequency		Hz	50/60	
Power consumption Max		VA	14.1	
Power dissipation Max		W	5.8	
Control input				
Terminals			CONTROL +/-	
Rated voltage			12-24VDC	
Operating range			8...30VDC	
Digital inputs				
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	
NTC probe input				
Terminals			NTC-NTC	
Sensor type			NTC (ordering code NTC01)	
Measuring range		°C	-25...+85	
Maximum connection lenght		mt	3	
Fan power supply				

Terminals			FAN +/-
Supply voltage (internal)			5VDC (provided by DCTL)
Fan type			2 built-in fans type EXP8004
Relay outputs			
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>
Insulations			
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Connections - power terminals			
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	5.5-6.5
		lbin/lbft	4.06-4.79 lbft
Connections - relay output			
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
Connections - fan and digital input			
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

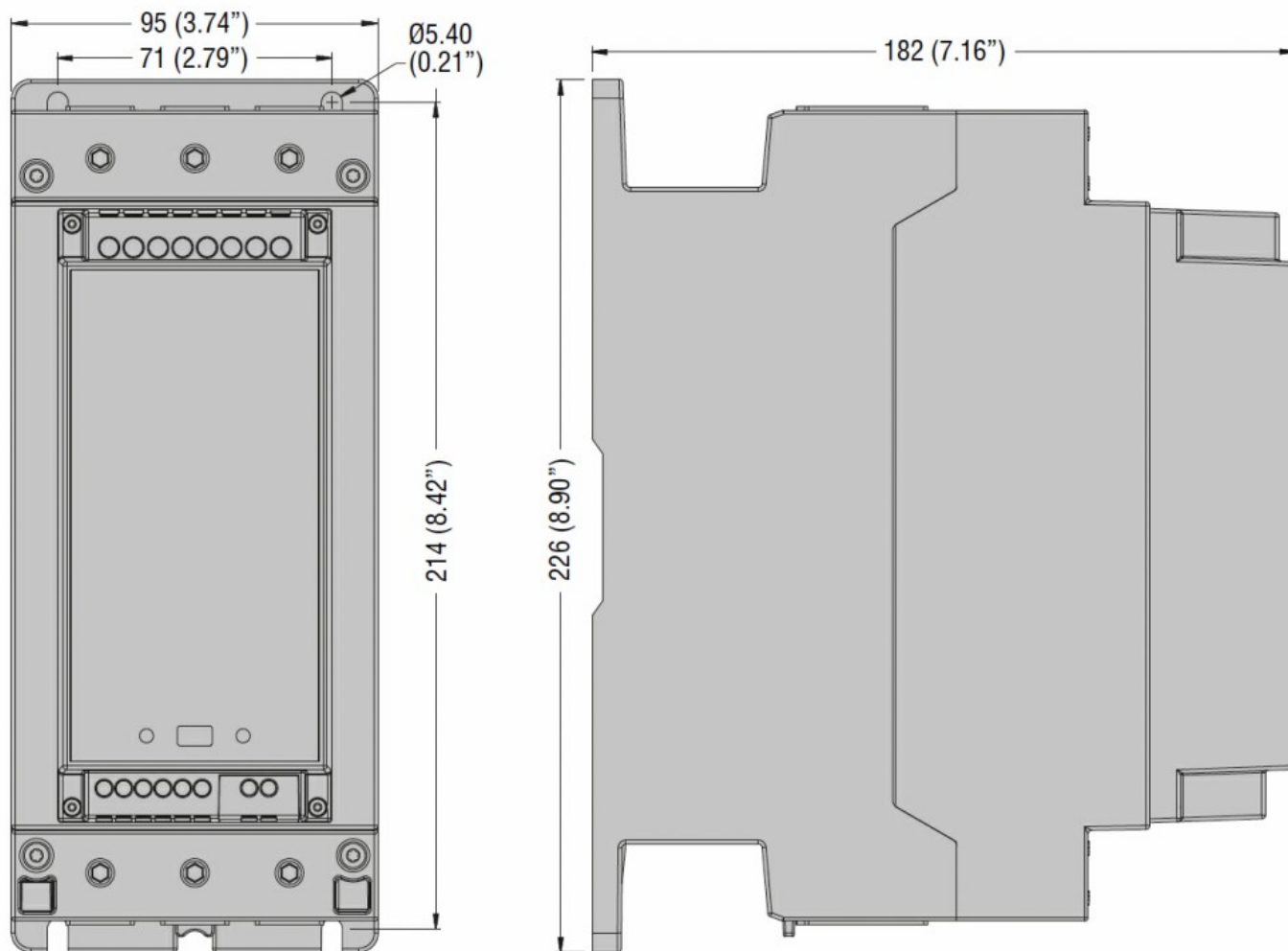
min	°C	-30
max	°C	+80

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)

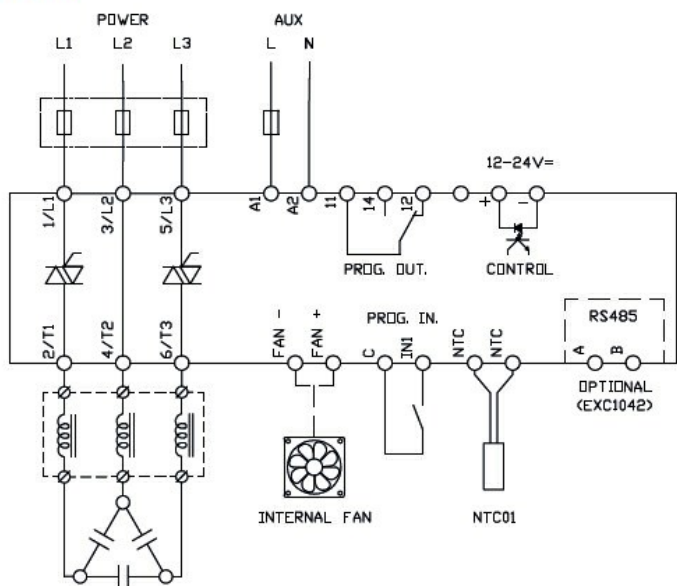
## Housing

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	95 x 226 x 182
Weight	g	2840

## Dimensions



## DCTL



## Compliance

IEC/EN 61000-6-2

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Certificates	
	cULus
ETIM classification	
ETIM 8.0	EC002055 - Solid state relay