



Product designation				Thyristor modules
Product type designation				DCTL
General characteristics				
Rated voltage	V	400		
Operating voltage range				340...440
Rated frequency	Hz	50/60		
Operating frequency range	Hz	45...65		
Rated current (Ie)	A	72		
Step power at	400VAC	kvar	50	
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)
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 length	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 ³ NC contact: 20x10 ³
Mechanical life	cycles	10 ⁷
Insulations		
Rated insulation voltage Ui IEC/EN	V	480
Rated impulse withstand voltage Uimp	kV	4
Connections - power terminals		
Type of terminal		Fixed - double lock clamp
Conductor cross section		
	min	mm ² 2 x 2.5
	Max	mm ² 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 ² 0.2
	Max	mm ² 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 ² 0.2
	Max	mm ² 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

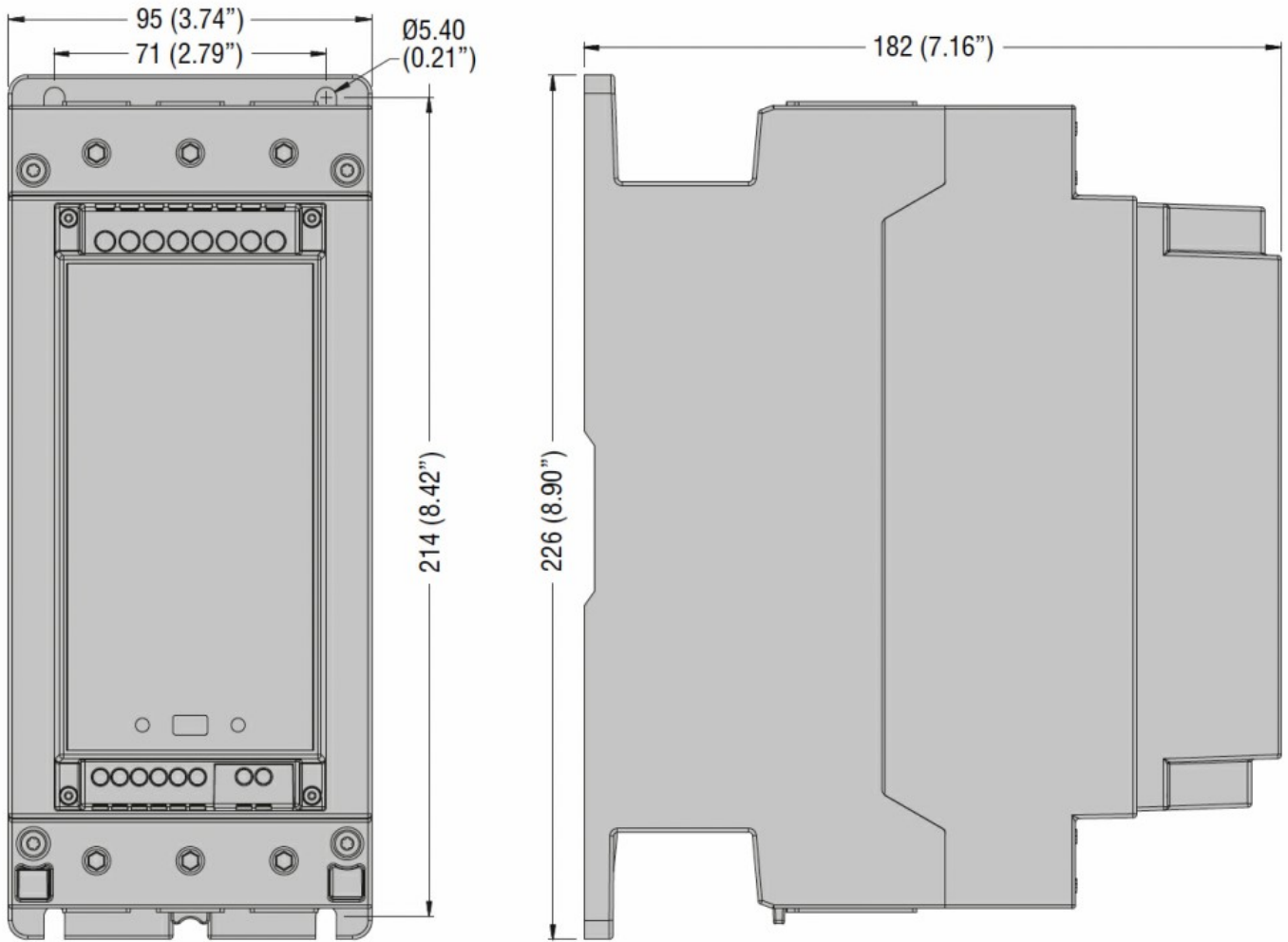
Dimensions (W x H x D)

mm 95 x 226 x 182

Weight

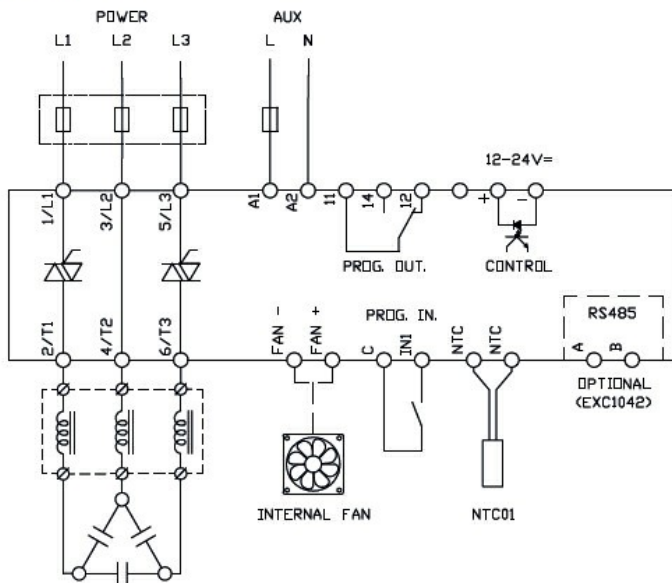
g 2840

Dimensions



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