



Product designation	11RF9
Product type designation	Motor protection relay

General characteristics

Number of poles	nr.	3
Overvoltage category		III
Pollution degree		3
Frontal IP degree		IP20
Type of release		Thermal
Protection fuse		
	gG (IEC)	A 40
	aM (IEC)	A 16
	RK5 (UL)	A 45
Phase failure detection		yes
Reset mode		manual

Power circuit characteristics

Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	8
Rated operational voltage	V	690
Operational frequency		
	min	Hz 0
	max	Hz 400
Operational current I_e		
	Operational current min	A 9
	Operational current max	A 15
Tripping class		10A
Test Button		yes
Trip indicator		yes

Terminals			
	type		screw and washer
	screw		M4
	width	mm	9.8
	tool		Phillips 2

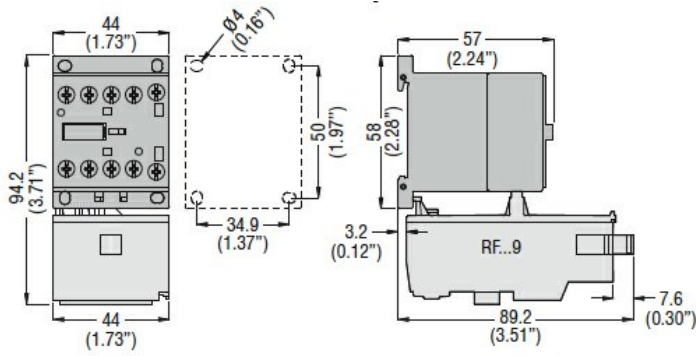
Tightening torque for terminals			
	min	Nm	2.3
	Max	Nm	2.3
	min	lbin	1.7
	max	lbin	1.7

Conductor section		
	AWG/kcmil max	10

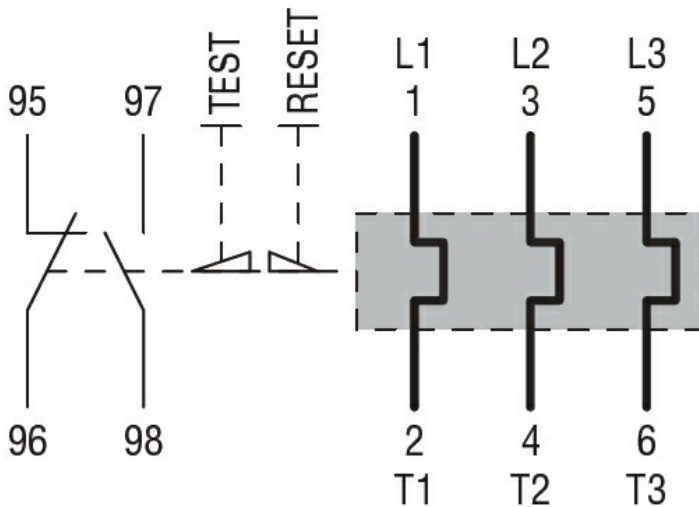
Auxiliary circuit characteristics

Auxiliary contacts			
	NO	nr.	1
	NC	nr.	1

Auxiliary Rated insulation voltage U_i IEC/EN	V	690
Auxiliary Rated impulse withstand voltage U_{imp}	kV	6
Auxiliary Rated operational voltage	V	690
Operating current AC15		
	24V	A 3
	120V	A 3
	240V	A 1.5
	380V	A 0.95
	480V	A 0.75
	500V	A 0.72
	600V	A 0.6
Operating current DC13		
	125V	A 0.11
	600V	A 0.22
IEC Conventional free air thermal current I_{th}	A	10
Terminals		
	Auxiliary circuit type	screw and washer
	Auxiliary circuit screw	M3,5
	Auxiliary circuit width	mm 8
	Auxiliary circuit tool	Phillips 1
Conductor section		
	Auxiliary circuit Flexible w/o lug max	mm ² 2.5
	Auxiliary circuit Flexible c/w lug max	mm ² 2.5
Tightening torque for terminals		
	Auxiliary circuit min	Nm 1
	Auxiliary circuit max	Nm 1
	Auxiliary circuit min	lbin 0.74
	Auxiliary circuit max	lbin 0.74
UL/CSA and IEC/EN 60947-5-1 designation		B600-P600
Ambient conditions		
Operating temperature		
	min	°C -20
	max	°C 55
Storage temperature		
	min	°C -55
	max	°C 70
Compensation temperature		
	min	°C -15
	max	°C 55
Max altitude	m	3000
Mechanical features		
Operating position		
	normal allowable	Vertical plan ±30°
Weight	g	116
UL technical data		
Full-load current (FLA) for three-phase AC motor		
	at 480V	A 15
	at 600V	A 15
Dimensions		



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-4-1

UL508

Certifications

CCC

CSA

cULus

EAC