60A Automatic Transfer Switch.

Description	
Part Number	CS-R60-4P
Conformity	Conforms to: BS EN 60947-6-1:2005 and later amendments BS EN 60947-1
Type	PC ATSE
Utilization Category	AC1
Ratings	415V 50/60Hz, 10KA, 60A

Function	
On Failure of Supply 1	1. Supply 1 contactor drops out and no supply is active. 2. Relay R1 opens 3. Timer TD2 activates for transfer delay 4. After transfer delay Supply 2 contactor engages to supply the load
On Return of Supply 1	1. Delay timer of Phase Failure Relay activates to avoid nuisance tripping (0 to 60s for tolerances, instant for phase failure) 2. Supply 2 contactor drops out and no supply is active. 3. Timer TD1 activates for transfer delay 4. After transfer delay Supply 1 contactor engages to supply the load
Manual / Auto Switch	
Man Mode	Switches over to Supply 2 from Supply 1
Auto Mode	Supply 1 active unless phase failure conditions are present.

Contactors	
Poles	4P
Maximum Thermal Current	60A (AC1)
Maximum Operating Rate (Operations / Hour)	3600
Average Coil Consumption (Inrush / Sealed)	200/20 VA
Heat Dissipation	6 to 10 W
Mechanical Life (Millions of Operations)	16

Connection	
Power Contact Terminal Capacity	16mm²

Transfer Delay Timers	
Description	
TD1	Supply 2 delay
TD2	Supply 1 return delay
Feature Characteristics	
Timing Mode	On Delay
Set Time (adjustable)	0.1 seconds to 30 hrs

Phase Failure Relay		
Supply Characteristics		
Supply Voltage		UN (380...415) V AC (50/60 Hz), 3-Ph 4-Wire
Supply Variation		Umin 220 V AC, Umax 510 V AC
Frequency		47 to 63Hz
Power Consumption (Max)		11 VA (Max)
Settings		
Trip Levels :		
	Under Voltage	Minimum voltage selector (300...400)V
	Over Voltage	Maximum voltage selector (380...480)V
	Trip Delay	Switch-off delay time (T on function diagrams) adjustable (0.5...60)s
	Asymmetry	Asymmetry adjustable (4...25)% UN
Functions		
		Window mode (overvoltage + undervoltage)
		Phase loss and rotation monitoring
		Asymmetry and Neutral loss
LED Indications		
	Healthy	Continuous Green LED
	Phase Loss	1 Pulse Yellow LED
	Phase Rotation	3 Pulse Yellow LED
	OV	Continuous Red LED
	UV	3 Pulse Red LED
	Neutral loss	2 Pulse Amber LED
	Asymmetry	4 Pulse Red LED

Enclosure	
Dimensions	500x400x210mm
Gland Plates	Bottom
Material	Mild Steel (Powder epoxy coated)

Panel LED Indications	
Supply 1	Available (White), On Load (Green)
Supply 2	Available (White), On Load (Amber)

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