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## RELAY SELECTION GUIDE- MICOM P634 VS MICOM P645



SYSTEM CONTROLS & SWITCHGEARS



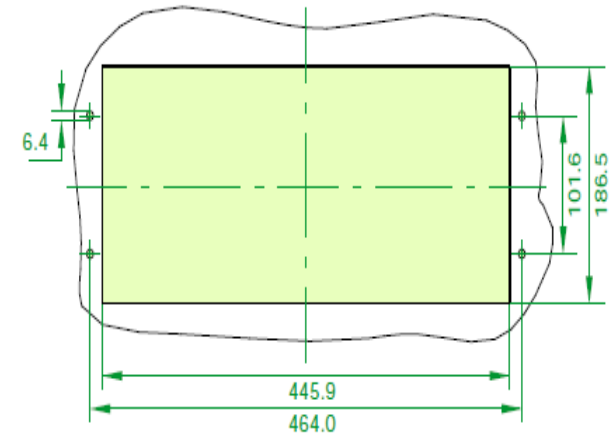
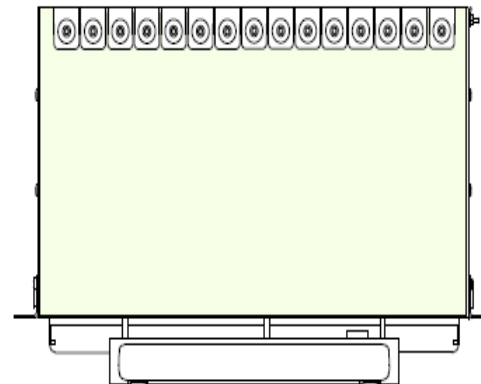
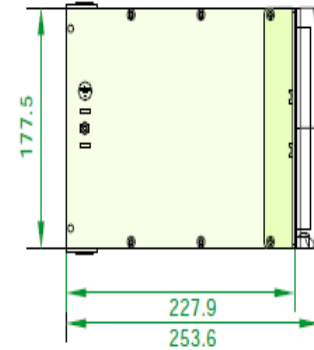
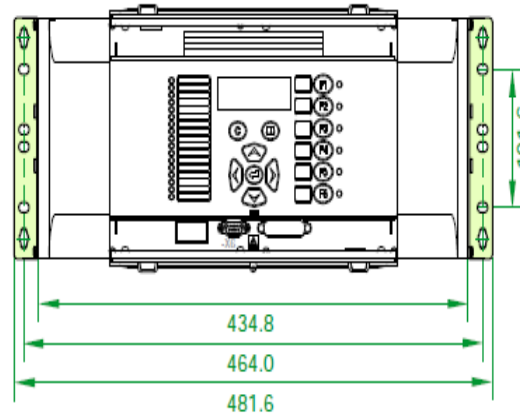
Online Solutions for Electrical Needs



# Overview

System controls & switchgears is one of the fastest growing companies in India. Established in 1983, a privately owned company has unrivalled experience in the distribution of electrical products. SCS business covers a broad range of Medium Voltage Switchgears, Low Voltage Switchgears, Power Capacitors, Internal wiring accessories, Lighting, Metal Detectors, Energy Management Products and other products. Over the last 3 decades history, we've developed strong relationships with customers. Our strength lives in all of our people, who have extended our tradition of service and integrity to customers in every location and situation, and who take pride in making us one of the most resilient resources in the products we deal.

## OLD RELAY- MICOM P634



Dimensional Drawings for the 84 TE Case

Weight -Case 84 T: approx. 11 kg

## NEW RELAY- MICOM P645



Weight (80TE case) 13 kg - 16 kg  
(depending on chosen options)

Dimensions in mm (w x h x l) (80TE case)  
W 413.2 mm H 177.0 mm D 243.1 mm

Mounting Panel, rack, or retrofit

Case 60TE/80TE

Number of CT Inputs 18 (15 Bias, 3EF)

Number of VT inputs 1 or 4

Number of bias inputs (3-phase CT sets) 5

Optically coupled digital inputs 16 - 40

Standard relay output contacts 8 - 24

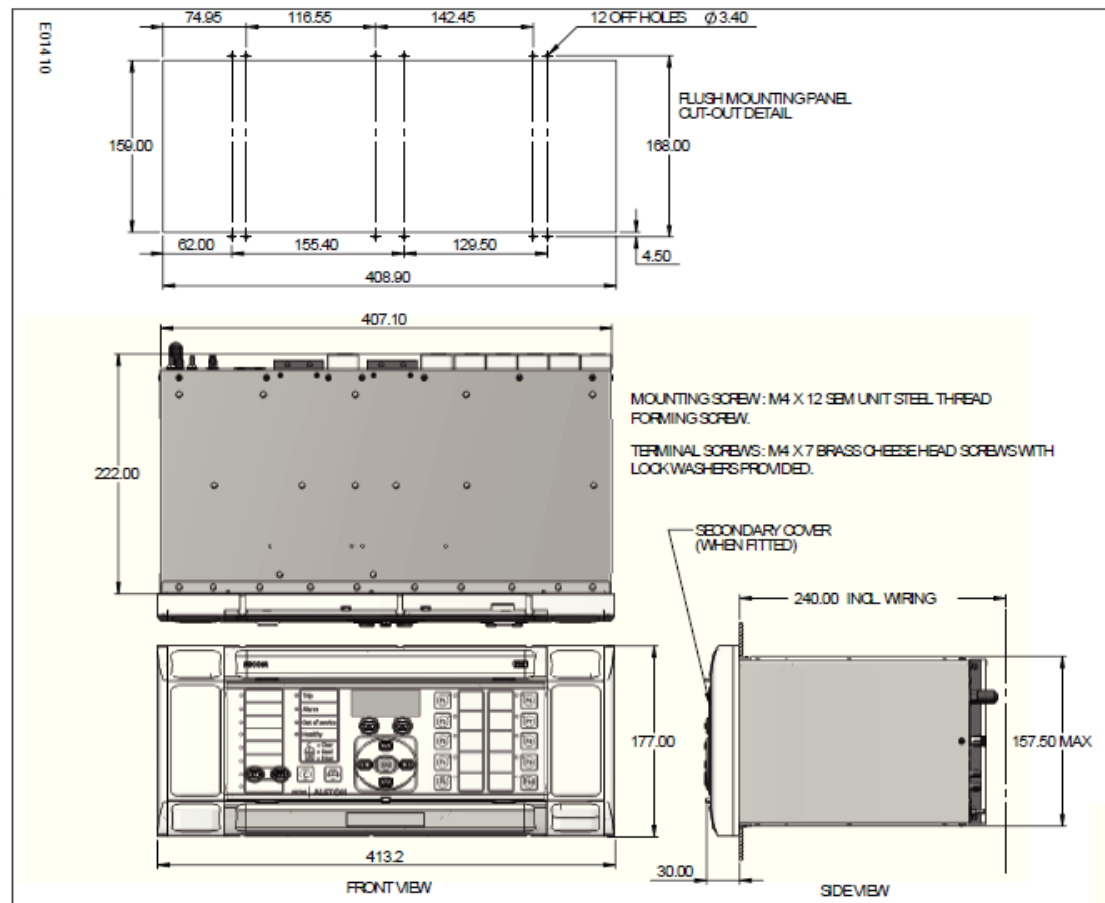
Function keys 10

Under voltage/Overvoltage/Residual voltage protection-Yes

Under frequency/Over frequency protection -Yes

Over fluxing protection 1-phase + 3-phase

Programmable LEDs 18 tri-colour



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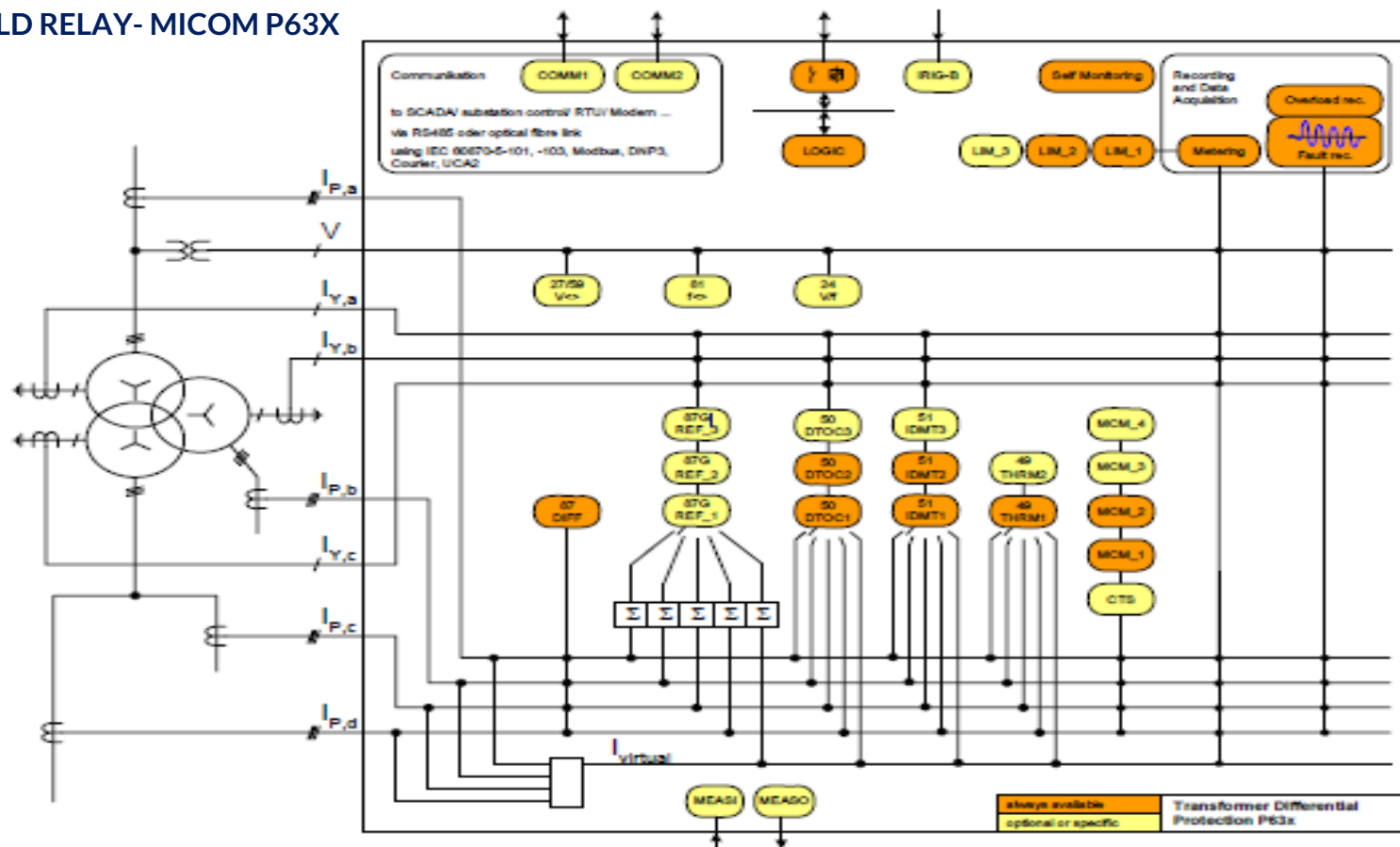
Functions Overview			P632	P633	P634
87	DIFF	Differential protection	2 wind.	3 wind.	4 wind.
87N	REF_x	Restricted earth fault protection	2	3	3
50	DTOCx	Definite-time O/C protection	2	3	3
51	IDMTx	Inverse-time O/C protection	2	3	3
49	THRMx	Thermal overload protection	1	2	2
27, 59	V<>	Over/undervoltage protection	1	1	1
81	f<>	Over/underfrequency protection	1	1	1
24	V/f	Overexcitation protection	1	1	1
50BF	CBF_x	Circuit Breaker Failure protection	2	3	4
	CTS	Current Transformer Supervision	1	1	1
	MCM_x	Measuring circuit monitoring	2	3	4
	LIMIT / LIM_x	Limit value monitoring	2	3	3
	LOGIC	Programmable logic	1	1	1
		Measuring inputs			
		Phase currents	2 x 3	3 x 3	4 x 3
		Residual current or star-point current	2	3	3
		Voltage	1	1	1
	INP / OUTP	Binary inputs and outputs			
		Optical coupler inputs	4 ... 10	4 ... 16	4 ... 10
		Add. optical coupler inputs	24	24	24
		Output relays	8 ... 22	8 ... 30	8 ... 22
	MEASI/ MEASO	2x 20 mA outputs, 20 mA input, RTD inputs	1	1	1
	COMM1/2/ IRIG-B	2 rear communication interfaces, IRIG-B	1	1	1
	COMM3	protection communication interface InterMiCOM	-	-	-
	IEC	IEC-61850-interface	1	1	1

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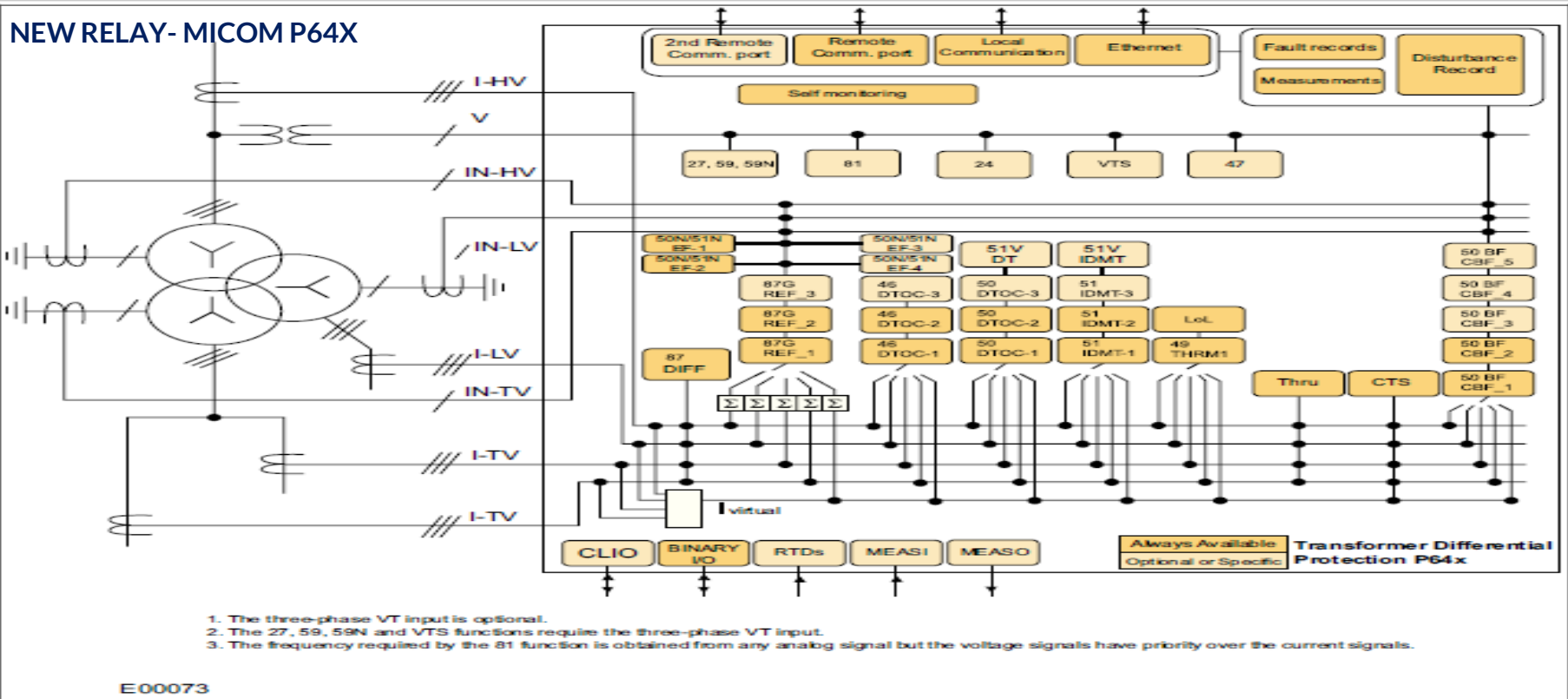
ANSI	IEC 61850	FEATURES	P642	P643	P645
		Number of bias inputs (3-phase CT sets)	2	3	5
		Number of residual/star-point CTs	2	3	3
		Single-phase VT input	1	1	1
		Additional single-phase VT input	(-)		
		Additional 3-phase VT	-	(-)	(-)
87T	LzdPDIF	Transformer differential protection	•	•	•
64	RefPDIF	High/ Low impedance Restricted Earth Fault protection (windings)	2	3	3
49	ThmPTTR	Thermal overload	•	•	•
24	PVPH	V/Hz overfluxing	1	1 (2)	1 (2)
LoL		Loss of life	•	•	•
Thru		Through fault monitoring	•	•	•
RTD	RtfPTTR	RTDs x 10 PT100 temperature probes	(-)	(-)	(-)
CLIO	PTUC	Current loop transducer I/O (4 input / 4 output)	(-)	(-)	(-)
50/51	OcpPTOC	Four-stage overcurrent protection (element)	(2)	(4)	(4)
51V		One-two stage voltage controlled O/C element	(+)	(+)	(+)
51R		One-two stage voltage restrained O/C element	(+)	(+)	(+)
50N/51N	Ef_PTOC	Four stage derived or measured standby earth fault (element)	(2)	(4)	(4)
46	NgcPTOC	Three-four stage negative phase sequence O/C elements	•	•	•
67/67N	RDIR	Directionalised O/C, SBEF, and NPS elements (with optional 3 VT or 2 VT)	(-)	(-)	(-)
50BF	RBRF	Breaker fail protection (number of breakers)	2	3	5
27/59/59N	PTUV/PTOV	Undervoltage, overvoltage and residual VN> (with optional 3 VT addition)	-	(-)	(-)
47	NgvPTOV	Negative phase sequence over voltage	(-)	(-)	(-)
81U/81O	PTUF/PTOF	one-four stage underfrequency / one-two stage overfrequency	-	-	-
VTS		VT Supervision	(-)	(-)	(-)
CTS		Differential CTS (patented)	•	•	•
TCS		Trip circuit supervision	•	•	•
		32 user alarms	•	•	•
		CT input exclusion	•	•	•
IRIG-B		IRIG-B time synchronizing input	(-)	(-)	(-)

## OLD RELAY- MICOM P63X



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## NEW RELAY- MICOM P64X



## ❖Disclaimer:-

Info given herein is for ease of understanding. Customized tech info is for specific purpose SCS suggests you to take confirmation on technical details from GE experts SCS does not take responsibility or claim this will suit your needs.





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