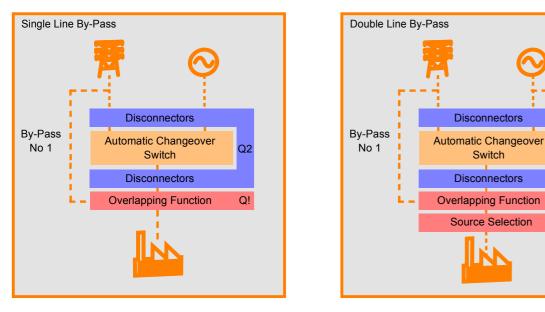
# MERTECH -----

# **Complete Solution**

By combining the Mertech Automatic Changeover Switch and the Mertech By-Pass Switch a complete solution is available for all types of installations. This complete solution guarantees continuity of the power supply during maintenance and test operations, giving complete isolation of the Automatic Changeover Switch and ensuring maintenance safety.

All Mertech By-Pass Switches also comply with the IEC 60947-6-1 standard.

# Two Versions of By-Pass



### **Normal Position**

By-Pass Position

ATS seamless transfer to the Bypass mode is achieved using the bypss line via Q1 to ensure continuity in the power supply to the load. Switch Q2 is then open to provide complete isolation from the power supply sources and to ensure safe interventions. Test Position

From the Bypass position, changeover switch Q2 can be closed to supply the ATS and achieve operational checks, without jeopardizing the supply to the load. Transfer to the normal position can then be achieved.

Q1 Q3 - **By-Pass** 

No 2



The load is supplied by the supply source

case of primary source failure, the ATS

automatically transfers the load to the

defined as the preferred source. In

alternate source when available.

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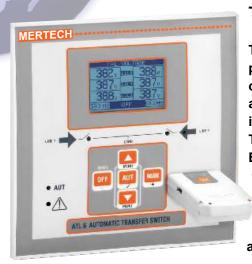
# MERTECH AUTOMATIC CHANGEOVER PANELS TO IEC 60947-6-1 · AUT • 1



# **AUTOMATIC CHANGEOVER SWITCHES TO IEC 60947-6-1**

# The Solution for Transfering Power in an Emergency

The Mertech Automatic Changeover Switches are the ideal solution for transfering power from the Mains to a Standby Supply or from Network to Network Supplies. With Mains or Network monitoring and full electrical and mechanical interlocking you can be confident of switching supply under fault conditions at any time. And with sizes from 40 Amps up to 6300 Amps we can pretty much cover the requirements of all your likely projects. With full conformity to the latest IEC 60947-6-1 you can confidently specify the Mertech MS range of Atomatic Transfer Switches.



Type Testing and Conformity

To offer conformity to BS EN 60947-6-1 a manufacturer has to test their product in line with the 'Type Tests' and 'Routine Tests' that are fully set out in the standard and detailed in sub clause 9.3.2.1 Table 7. These tests are rigorous, as would be expected of a product which can have such an important function. The tests in the standard include such things as Temperature Rise, Dielectric Properties, Making and Breaking Capacities, Electrical & Mechanical Operational Performance and Short Circuit Capacities.

Mertech manufactures three different types of Changeover Panels, Contactor Type - MS ACOC, Motor Operated Switch Type - MS ACOS and BreakerType - MS ACOB.

## Life Safety By-Pass Switches

For applications requiring to comply with the latest 'Life Saftey' standards, Mertech manufacture a complimentry range of single and double manual by-pass switches. By-Pass switches are manual four pole transfer switches with positive break indication. They are designed to isolate the Autom atic Changeover Switch with minimum interruption to the load supply.

### **Transfer Control devices**

The transfer control devices can be designed to suit any application as long as the controls comply with the sequence and limits of operation as stated in the specification. A number of devices are offered on Mertech Automatic Transfer Switching Equipment. All have been tested and comply with the specification and some go well beyond the minimum requirements set out.



CURRENT RATINGS		CONTACTOR	MOTORISED SWITCH	CIRCUIT BREAKER
AC-31B	AC-33B	MS A COC	MS A COS	MS A COB
40A	20A	х		
60A	40A	х		
100A	65A	х		Х
160A	110A	х	х	х
250A	150A	х	X	Х
315A	265A	х	х	х
400A	320A	х	X	х
630A	520A	х	х	х
800A	630A	х	X	х
1000A	-	х	x	х
1250A	-	х	X	Х
1600A	-	х	x	х
2500A	-		X	Х
3200A	-		x	х
4000A	-			Х
5000A	-			х
6300A	-			x



The new interface allows the user to clearly see in an easy way:

- System status
- Voltage and Hz status
- Statistical data
- Control thresholds
- Pop-up windows for alarms

The inovative control module can also can be programmed & monitored from a PC, a smartphone or tablet with it's own dedicated app. The communication option allows RS232 - RS435 and for full Opto-Isolated Ethernet interface with web server function.



**ACOC Contactor ATS** 

**ACOS Motorised Switch ATS** 

# Graphic LCD display and text in 5 languages

The new front panel combines a modern design with a clear and intuitive user interface with a backlit 128x80 pixel graphic LCD panel which makes the user's interface easier with benefits on bad light condition.

Texts in 5 different languages are available: English, Italian, French, Spanish and German.