

Motor Test Console



Motor test consoles are designed for off-load testing of 3 phase motors prior to re-commissioning and returning to service. The test console allows the voltage to be increased incrementally to ensure the motor performs satisfactorily at each stage before running at full voltage. A combined 0 – 5 kV AC flash tester and 500V DC mega ohm meter enables suitable tests to be carried out prior to running.

The Rotary motor test console operates through a transformer, a robust technology that gives many years of reliable service. The test motors are connected to corresponding sockets on the side of the test console and one set of corresponding plugs are supplied.

In addition to 3 phase testing, motor test consoles have the option of testing single phase AC and DC motors up to 240V and up to 60 amps.

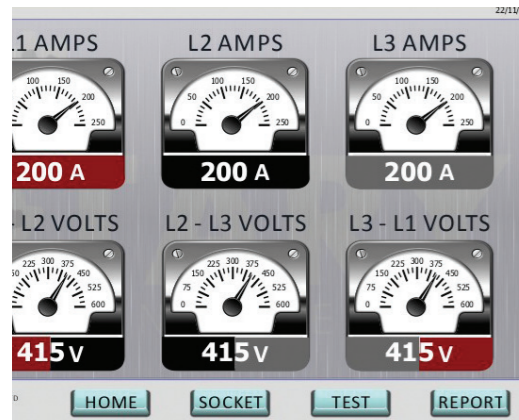
Up to 6 stepped voltages are available and can be specified at the time of ordering. Standard voltages are: 50 V, 110 V, 240 V, 415 V, 500 V, 550 V.



Standard Test Consoles

Incremental increase of voltage through tap change switches

- Tap change switches which allow the voltage to be increased incrementally to ensure that there are no electrical or mechanical faults before running at full voltage
- Full load current can be determined using the locked rotor method
- 3 x ammeters, one for each phase
- 1 x single switched voltmeter



Touch Screen Test Consoles

The touch screen, PLC controlled test console offers full and semi-automatic testing with data storage to save results and output to printer, USB storage or suitable PC.

Throughout the testing sequence the motor performance is displayed on the large touch screen enabling the test engineer to clearly assess the motor.



High Voltage Flash Tester

The HAL Flash Tester supplied with the Motor Test console to enable HiPot and Insulation Resistance (IR) testing. Features include:

- Integrated 5 kV flash tester / 500 Vdc high voltage tester for HiPot, and Insulation Resistance tests. Includes:
- Electronic storage of test results with output to printer option
- Visual and audible alarms
- EN50191, IEC/EN 60950, IEC/EN 61010, BS EN 60335-1, BS EN 60598# and BS EN 60745.compilant
- Provides bar-code read facility for control of inventory
- Meets requirements for traceability of equipment and results
- Fast automatic production testing using sequence capability
- Single button operation with simple PASS/FAIL indication
- Multiple language capability
- Electrically isolated outputs provide protection for the user and safe environment



MOTOR TEST CONSOLE	TC100	TC150	TC250	TC320	TC400
Standard units	75 kW 100 HP	100 kW 150 HP	180 kW 250 HP	240 kW 320 HP	298 kW 400 HP
Current	83 amps	104 amps	153 amps	194 amps	243 amps
Standard tap change voltages	50 V, 110 V, 240 V, 415 V, 500 V, 550 V These may be changed to suit local supply voltage				
Standard electrical supply	415 V, 3 phase, 50 Hz / 60 Hz Other supply voltages considered				
Motor connections (amps), Sockets fitted and corresponding plugs supplied					
16	✓	✓	✓	✓	✓
32	✓	✓	✓	✓	✓
63	✓	✓	✓	✓	✓
125	✓	✓	✓	✓	✓
200				✓	
250					✓
Transformer (KVA)	60	75	110	140	175
Test Console Standard					
Ammeters	3, one for each phase with range switches at x5, x10, x20 and x30				
Voltmeter	With range switch for 0-150V, 300V and 600V and selection switch for L1 to L2, L2 to L3 or L3 to L1, line to line voltages.				
Touch Screen Test Console					
Operator interface via 21" (53cm) touch screen					
Semi and fully automatic test sequences					
Data storage and data output via USB to printer / PC					
Optional Specifications – all test consoles					
Single phase AC testing	Variable up to 240V, current up to 30 amps or 60 amps				
Single phase DC testing	Variable up to 240V, current up to 30 amps or 60 amps				
HAL - HiPot / Flash & Insulation Resistance Tester					
AC HiPot / Flash Test					
Voltage Range	0.100 – 5.000kV (programmable)				
Voltage Resolution	10V/step (settable)				
Voltage Accuracy	1% of reading				
Maximum Output Current	20mA @5kV 50/60 Hz Selectable				
Display Current Range	0.01 – 20.00mA				
Current Accuracy	1% of Reading				
Display Current Resolution	0.01mA				
DC HiPot / Flash Test					
Voltage Range	0.100 – 6.000kV (programmable)				
Voltage Resolution	10V/Step (Settable)				
Voltage Accuracy	1% of reading				
Maximum Output Current	10mA @ 6kV				
Display Current Range	0.01 – 10.00mA				
Current Accuracy	1% of reading				
Display Current Resolution	0.01mA				
Output Ripple	<5% @ 6kV				
Insulation Resistance					
DC Output Voltage	250, 500 OR 1000V selectable, or fully adjustable from 10 – 1000V				
Resistance Ranges	0.1 – 100.0M Ohm 100 M – 1G Ohm				
Measurement	0.1M -700M Ohm, 5% of reading 700M				
Accuracy	1G Ohm, 10% of reading				
ARC Detection					
Detect Current	10 Levels				
External Connectors					
Printer	RS-232				
PC	RS-232				
Beacon	Yes				
Guard Switch	3-pin				
PLC Dual	3-pin				



Rotary Engineering works in partnership with clients worldwide, manufacturing a range of equipment and offering everything from a one off piece of equipment to an entire workshop.

Our experienced team are happy to provide specialist advice, respond to tenders and support our contacts around the world.

Rotary's origins can be traced back to 1896 when W.E Burnand first made industrial equipment from our workshop here in Sheffield. Today the business has evolved to become Rotary Engineering UK Ltd, proudly established as an innovative specialist UK manufacturer supplying the motor rewind and coil manufactures in addition to the design, manufacture and repair of electromagnets.



Designed and manufactured in the UK



Specialist advice and support available



Option to configure specifications to meet individual requirements



Easy to operate, cost effective equipment



Worldwide service and support