ESSWIN

HT & LT SWITCHBOARDS

ESSWIN ELECTRO CONTROLS PVT. LTD.

ESSWIN

Esswin Electro Controls Pvt Ltd was founded in Delhi, India in the year 1988 as a sole proprietorship firm initially called as Esswin Electro Controls and was subsequently incorporated as a private limited company in the year 2012.

Esswin Electro Controls is thriving as a strong, consistent, Multifaceted, Multi disciplinary and vibrant organisation totally committed to quality and customer satisfaction. Long term relationship and repeat orders are testimony of the highest standard of quality and Customer satisfaction.

We are an ISO 9001:2015 certified company. Esswin Electro Controls Pvt Ltd has made it's position in competitive market by proving quality, safety and Timeline in Electrical and Instrumentation contracting company which provides premier Engineering-Procurement- Construction (EPC) contract solutions consisting of supply, erection, testing and commissioning by transcendent project execution specialists.

Also Esswin have Manufacturing facility in Rudrapur and providing quality product of LT Panels, Bus Duct, Powder Coated Cable Tray, Race ways, SS Cable Tray. The Unit is equipped with Hi- Tech machine, tools and team of professionals who designs and manufactures.

We have added a vertical to above which provides support to Industrial plant for their Power Quality Monitoring and subsequently solution for same in terms of product and knowledge. It Was acknowledged and certified as ECOEXPERT by Schneider Electric.

COMPETITIVE ADVANTAGES

- Tailored Solution
- Research based Development
- Cost effective Solutions
- Products with latest technology
- On time Delivery
- Prompt after sales supports

HT ELECTRICAL PANELS

Esswin, offers a comprehensive range of best quality HT and LT Electrical Panels. These panels are unit products of smart quality raw materials in accordance with industrial quality standards.

With future-ready technology, strict quality policy and a constant compulsion to progress, our products are always par excellence and satisfy our patrons.

HT PANELS

Medium Voltage Panel 11KV & 33KV

HT PANEL

Voltage	33KV & 11KV
Frequency	50Hz
STR	18.4kA to 40kA
Current Rating	630A-3000A
Bus Bar	Al. / Cu.
VCB	CG made VCB & VCB Kit
Relay	Schneider
Meters	Schneider
Protection	Indoor/Outdoor
Type	Draw out/Fix Type VCB
Duty Cycle	O-0.3sec-CO-3min-CO
NO Contacts	6 NO + 6 NC
PT	FIX / Draw out

LT ELECTRICAL PANELS

LT PANELS

LT Panels are used with low tension cables to obtain power from the generator or transformer and distribute electricity to various electrical devices and distribution boards. LT panels are designed to function at lower voltages (up to 690 Volts) with low insulation levels.

SALIENT FEATURES

- Design tested at CPRI for short circuit, temperature & Ingress protection rise as per IS standards
- Tested designs type at 65KA STC with switchgear.
- 4000 A panels successfully tested at CPRI for TR, SC & IP - 65 as per IS standards.
- Form 1/2/3a/3b/4a/4b design, in DOP- IP- 54.
- CNC fabricated fully bolted standardized designs
- Computer Aided Design(CAD) systems
- Panel enclosure degree of protection IP - 54, IP - 55 & IP - 65
- Anti corrosion treatment
- Automatic spray conveyrised Pre Treatment plant with 9 Tank Process
- Painting in dust & vermin proof paint booths & ovens
- Non hygroscopic SMC bus bar supports for best mechanical & electrical strengths for fault current withstand.
- Bus bars and interlinks are insulated with heat shrinkable PVC sleeves
- Provision for future expansion for both sides.
- All live parts are shrouded with polycarbonate sheets.
- Certified core component supply from Schneider.

Certified
Core Components
Panel Builder
Life Is On Schneider Electric

LT ELECTRICAL PANELS

Power Control Centre

PCC offers upto 4000A rating suitable for operational Voltage of 415V in a 3 phase 4 wire distribution system with an insulation voltage upto 660V at an ambient Temperature of 450C

Motor Control Panel

For IV of Separation, type tested for 50kA short circuit withstand capacity and IP:54 degree of protection. Available in fully drawout type, semi-drawout type & fixed type versions in single and double front design.

LT ELECTRICAL PANELS

VFD/PLC Panels

Ready made & as per customer specifications complete with wiring and harnessing for various type of industries.

Control Relay & Mimic Panel

Custom made design for specific requirements for control &status with mimic diagram depicting the system layouts. Available with protection relays, annunciators & alarm devices.

Closed Transition S/D starter

Rating 110KW - 450KW. No break in supply to the motor during starting.

LT ELECTRICAL PANELS

Capacitor Panel (APFC)

contractor based/Thyristor based/Hybrid

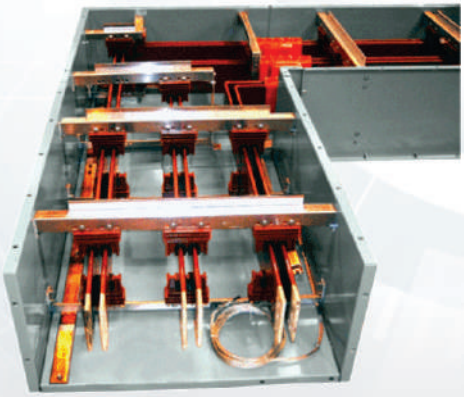
Auto Capacitor Panels upto 1000KAR with or without harmonic filters. PC interface conforming to RS232 / RS485 to download electrical parameter. Optional thyristor switching.

Feeder Pillar

IP:55 type feeder pillars for outdoor & indoor applications in various industries, Hotels and Townships.

Bus duct

A bus duct is a sheet metal duct containing either aluminum or copper busbars (metallic strips or bars that conduct a substantial electrical current) in a grounded metal enclosure.



DG synchronising relay/ PLC

- Manual PLC / DIEF / Woodword Relay based DG Synchronization and Load Management
- Provision for BMS Compatibility.
- Single Point access for all incoming/outgoing feeder parameters through HMI display.

LT ELECTRICAL PANELS

Fire fighting control Panel

Fire Fighting Panels ,Fire pump controllers are control panels containing electrical components such as circuit breaker, switches, VFD, relays & other devices dedicated to the operation of fire pumps.

Power Transfer Switch - upto 4000A

Transfer loads between alternate sources of power regardless of ampacity size efficiently. Combined with programmable microprocessor controllers, with most advanced method of transferring loads.

LT Isolator Panel

To isolate the power in between transformer & main LT panel, where these two are not put together.

Hazardous Area Panel

The enclosure is made of FRP/poly carbonate supplied by in-house manufacturer suitable for hazardous environment area like ETP & Acidic fume area.

POWER DB & PB STATIONS

SS 304 enclosed Motor Isolator & Remote PB Station

SS 304 enclosed switch-disconnectors, ready to be fixed on workshop wall or directly on the machine and wired to main supply circuit and to load.

Construction DB-IP 65

The DB used in construction site by different packaged vendor for electrically safe distribution at site.

110V Power Supply unit for hand tools

Used where client's safety team is very particular about low voltage supply for hand tools.

Industrial Socket 16/32/63 Amps

Available with different rating of power socket in combination with RCBO/MCB.

CPRI TEST CERTIFICATES

Tel. No.0755-2586343
Fax No. 0755 – 2587774
Email: cpribpl@sancharnet.in

CENTRAL POWER RESEARCH INSTITUTE
GOVINDPURA : BHOPAL – 462 023

PROVISIONAL REPORT

16 FEB 2016

Test Report No.S2160197 Date of test: 15th February, 2016

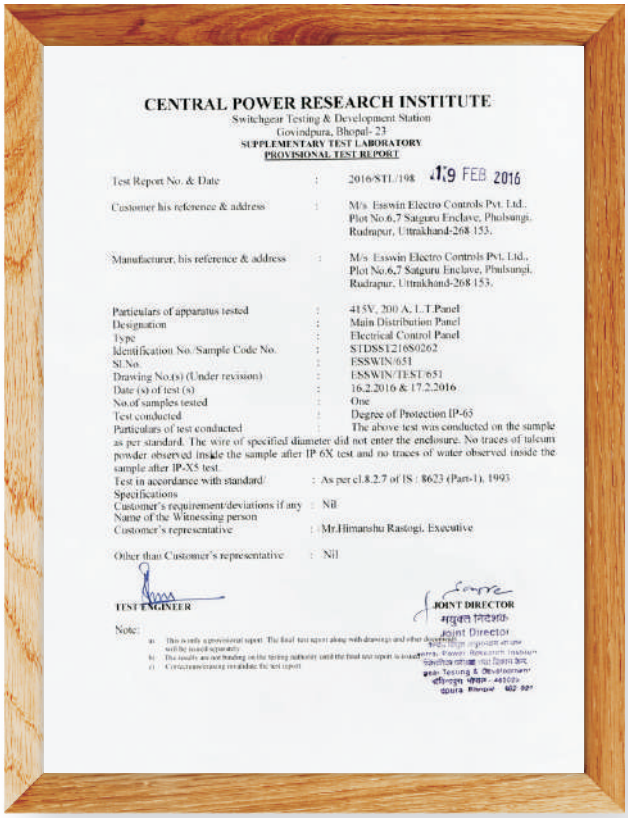
1. **Customer:** M/s Esswin Electro Controls Pvt. Ltd., Rudrapur
2. **Sample tested:** 415V, 4000A LT Switchboard (Non Extendable)
3. **Serial Number:** ESSWIN/511 **4. Sample Code No.:** STDSST21650261
5. **Type:** Power cum motor control centre **5.1 Designation:** Main Distribution Board
6. **Drawing Number:** ESSWIN/TEST/511 Page No. 01 of 02 & ESSWIN/TEST/511 Page No. 02 of 02 (Drawings to be revised and verified)
7. **Rating of the Sample:**
7.1 **Rated Voltage :** 415 V **7.2 Rated Current :** 4000 A
7.3 **Rated Insulation voltage :** 660 V **7.4 No. of phases :** Three phase + Neutral
7.4 **Rated short time current:** 50 kArms for 1.0 second with initial peak of 105 kA
8. **Sample tested for the following ratings:**
8.1 **Voltage :** 415 V **8.2 Current :** 4000 A
8.3 **Insulation voltage :** 660 V
8.4 **Short time current:** 50 kArms for 1.0 second with initial peak of 105 kA
9 **Type of test carried out:** Verification of the short circuit withstand strength
10 **Specification followed:** As per cl. 8.2.3 of IS:8623 (Part-1), 1993
11 **Test results:**

Oscillogram No.	Short time current in kApk/kArms R	Y	B	Duration in second	Equivalent current for 1.0 second in kArms
S2160197 S02	51.28	50.81	108.56/50.32	1.0	51.28
(Three phase Short circuit withstand strength test on main circuit busbars of HBB+VBB+HBB)					
S2160197 S04	84.96/30.83	-	-	1.0	30.83
(Single phase Short circuit withstand strength test on neutral & nearest phase of main circuit busbars of HBB+VBB+HBB)					

Observations: No abnormality. Fine wire fuse intact. All busbars & supports intact.
Remarks: After test the sample withstood HV test at 2.5 kVrms for one minute as per standard.

TEST ENGINEER **LABORATORY IN-CHARGE**

This is only a provisional report. The final report alongwith drawings and other documents will be issued separately within one month from the date of test.

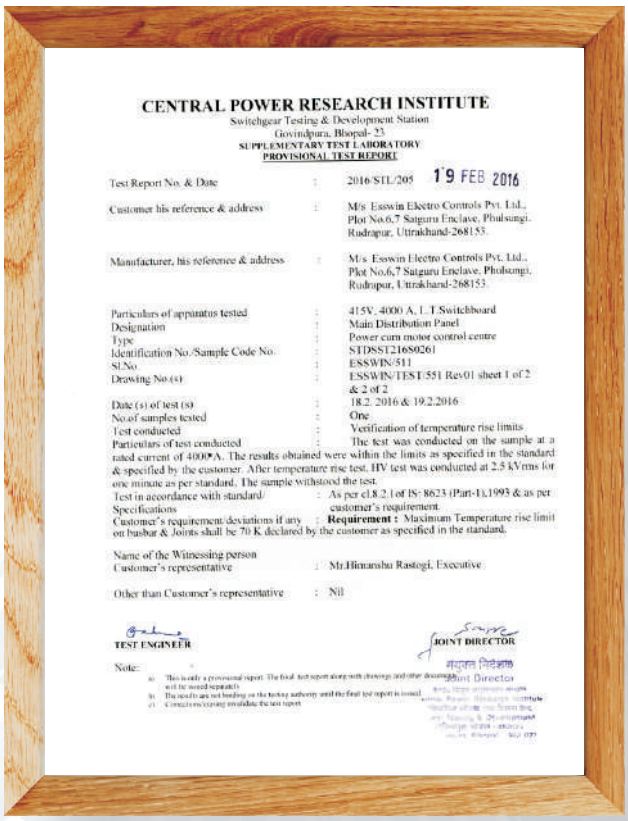


CENTRAL POWER RESEARCH INSTITUTE
Switchgear Testing & Development Station
Govindpura, Bhopal- 23
SUPPLEMENTARY TEST LABORATORY
PROVISIONAL TEST REPORT

Test Report No. & Date	:	2016/STL/198 19 FEB 2016
Customer his reference & address	:	M/s Esswin Electro Controls Pvt. Ltd., Plot No.6,7 Satguru Enclave, Phulsungi, Rudrapur, Uttrakhand-268 153.
Manufacturer, his reference & address	:	M/s Esswin Electro Controls Pvt. Ltd., Plot No.6,7 Satguru Enclave, Phulsungi, Rudrapur, Uttrakhand-268 153.
Particulars of apparatus tested	:	415V, 200 A, L.T.Panel
Designation	:	Main Distribution Panel
Type	:	Electrical Control Panel
Identification No./Sample Code No.	:	STDSST21650262
Sl.No.	:	ESSWIN/651
Drawing No.(s) (Under revision)	:	ESSWIN/TEST/651
Date (s) of test (s)	:	16.2.2016 & 17.2.2016
No.of samples tested	:	One
Test conducted	:	Degree of Protection IP-65
Particulars of test conducted	:	The above test was conducted on the sample as per standard. The wire of specified diameter did not enter the enclosure. No traces of talcum powder observed inside the sample after IP 6X test and no traces of water observed inside the sample after IP-X5 test.
Test in accordance with standard/ Specifications	:	As per cl.8.2.7 of IS : 8623 (Part-1), 1993
Customer's requirement/deviations if any	:	Nil
Name of the Witnessing person Customer's representative	:	Mr.Himanshu Rastogi, Executive
Other than Customer's representative	:	Nil

TEST ENGINEER JOINT DIRECTOR

Note:



CENTRAL POWER RESEARCH INSTITUTE
Switchgear Testing & Development Station
Govindpura, Bhopal- 23
SUPPLEMENTARY TEST LABORATORY
PROVISIONAL TEST REPORT

Test Report No. & Date	:	2016/STL/205 19 FEB 2016
Customer his reference & address	:	M/s Esswin Electro Controls Pvt. Ltd., Plot No.6,7 Satguru Enclave, Phulsungi, Rudrapur, Uttrakhand-268153.
Manufacturer, his reference & address	:	M/s Esswin Electro Controls Pvt. Ltd., Plot No.6,7 Satguru Enclave, Phulsungi, Rudrapur, Uttrakhand-268153.
Particulars of apparatus tested	:	415V, 4000 A, L.T.Switchboard
Designation	:	Main Distribution Panel
Type	:	Power cum motor control centre
Identification No./Sample Code No.	:	STDSST21650261
Sl.No.	:	ESSWIN/511
Drawing No.(s)	:	ESSWIN/TEST/551 Rev.01 sheet 1 of 2 & 2 of 2
Date (s) of test (s)	:	18.2. 2016 & 19.2.2016
No.of samples tested	:	One
Test conducted	:	Verification of temperature rise limits
Particulars of test conducted	:	The test was conducted on the sample at a rated current of 4000A. The results obtained were within the limits as specified in the standard & specified by the customer. After temperature rise test, HV test was conducted at 2.5 kVrms for one minute as per standard. The sample withstood the test.
Test in accordance with standard/ Specifications	:	As per cl.8.2.1of IS: 8623 (Part-1),1993 & as per customer's requirement.
Customer's requirement/deviations if any	:	**Requirement :** Maximum Temperature rise limit on busbar & Joints shall be 70 K declared by the customer as specified in the standard.
Name of the Witnessing person Customer's representative	:	Mr.Himanshu Rastogi, Executive
Other than Customer's representative	:	Nil

TEST ENGINEER JOINT DIRECTOR

Note:

CLIENTS

and
many more...

CONSULTANTS

ESSWIN

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