a strong commitment to serve better always...



Product Catalogue





BCH ELECTRIC LIMITED

we care for you



a wholly owned Indian company with

global

business connections.

Leading Manufacturers of low voltage electrical and electronic controls



BCH Electric Limited an ISO 9001:2000 company, is today one of the leading manufacturers of low voltage electrical and electronic controls. It is a wholly owned Indian Company with a wide network of global business connections.

The company's strong focus on customer satisfaction is reflected in its wide product range, catering to the requirements of customers in the Electrical Field. This includes Automation, Switchgear, Enclosures, Brakes and Crane Control Products.

A strong R & D base, state-of-the-art tool design, development and manufacturing capabilities and emphasis on quality has helped the company achieve benchmarks for its products and services.

BCH Electric, as always, remains committed to customer satisfaction and loyalty, and will continue to broaden its portfolio with more services and products to further strengthen its partnership with customers.



Vision

To offer products and solutions to enable hazardfree use of electrical energy for everyone and everywhere

Core Values

World-class Standards Innovation and Creativity Honesty and Integrity Institution Building Caring for People Contribution to Society Upholding 'Dharma'

Quality Policy

We are committed to provide products and services meeting or exceeding customers' needs and expectations.

Continual improvement and learning aimed at customer satisfaction through involvement of people shall be our guiding principle.





the benefits ...

- Our Expertise in manufacturing
- Our Superior product design
- Our Experience of over four decades
- Our Standards
 of latest national and
 international

Index

Enclosures	
Contactors & Relays	
Electric Motors & Cables	
Motor Starters	
Capacitors & Power Distribution	
Control Devices	
AC & DC Brakes	
Custom Build Products	

• BCH Boxes - IP 55 & 66 • Techno Modular Enclosures • Techno Racks • MCB DBs	01 - 02
 DC Contactors • Freedom Contactors • Citation Contactors • NHD - 2 Pole Contactors • NHD 4 Pole Contactors • Definite Purpose Contactors • Freedom Over Load Relays • Citation M Overload Relays • Electronic Over Current Relay 	03 - 07
 High Efficiency Motors - General Purpose - FFF Premium Efficiency Motors - General Purpose - FFF High efficiency Motors - Inverter Duty - FFF Premium Efficiency Motors - Inverter Duty - FFF 3-Core Flat Cables for Submersible Pump Applications Single & Multicore PVC Flexible Cables 	07 - 08
BCH DOL Starters BCH Star Delta Starters Submersible Pump Starters Mini Manual Starters	08 - 10
LT Power Capacitors PS - Plugs & Sockets SS - Plugs & Sockets DS Decontactors Power Receptacles Switch Disconnector Fuse Fuse Switch Units	10 - 13
• Electronic Sensors • MINI Limit Switches • Heavy Duty Range • Foot Switches • Push Buttons & Indicating Lights • Push Buttons & Indicating Lights 22.5 mm • Electronic Timers / IBT Timer • Time Delay Relays	14 - 17
• AC Brakes / AC Solenoids • DC Electromagnetic Brakes	18
AC Crane Control	19 - 20



Enclosures & Boxes

BCH Boxes - IP 55 & 66

BCH Boxes and Terminal Boxes are available in various sizes suitable for wide range of applications. These are characterised by aesthetic finish and versatile usage. The boxes are manufactured on Turret Punch CNC machine, are powder coated followed by PU gasketing resulting in unmatched durability.

Specifications & Features

BCH BOXES

Range

- From 200 x 200 x 150 (H x W x D) in mm through 1200 x 1000 x 300 (H x W x D) in mm
- Single & Double Door version
- 51 different variants comprising IP 55 / IP 66 versions

Features

- Fabricated from 1.2 / 1.6 mm CRCA sheet steel
- Powder coated surface (RAL 7032) followed by PU gasketing
- · With mounting plate & gland plate

TERMINAL BOXES

Range

- From: 150 x 150 x 80 (H x W x D) in mm through: 400 x 800 x 120 (H x W x D) in mm
- 43 different variants comprising IP 55 / IP 66 versions

Features

- Fabricated from 1.2 mm CRCA sheet steel
- Powder coated surface (RAL 7032) followed by PU gasketing
- Provision of brackets to facilitate DIN rail mounting



Techno Modular Enclosures

Completely modular & fully bolted concept of enclosure systems providing unmatched flexibility. These are manufactured on CNC machine, powder coated to shade RAL 7032, PU gasketed, fitted with 3 point lock and various user friendly accessories.

- Enclosures
 Range from: 1800 x 600 x 400 (H x W x D) in mm
 Through: 2200 x 1200 x 800 (H x W x D) in mm
 19" Rails
- Rails from 35U to 44U

- IP 55 degree of protection
- 3 mm mounting plate as a standard, RAL 2000 -Orange Colour
- Ideal for: Special purpose machines, Control panels, Telecom / IT enclosures, Starter enclosures





Techno Racks

Specifications & Features

Wall Mounting Enclosures:

- Available from 6U TO 15U
- Toughened glass on door adds to visual appeal and durability
- Lockable & removable front glass door
- Choice of colours available

Networking Racks:

- Available from 24 U to 45 U
- With 2 pair of 19"angles as standard
- Floor mounted design in robust construction.

Open Racks:

- Best Solution for the call centres and data centres
- Can House adequate quantity of switches, Hubs, Routers and Modems etc
- Desktop pc servers can also be housed in the Techno RACKs 2-Post racks



MCB DBs

- Single / Three Phase : 4 way to 12 way
- Single & Double door version
- Horizontal / vertical / tier type
- MCB / RCCB/ MCCB incomer options
- DBs for indoor / outdoor applications
- Suitable for surface / recess mounting
- · Made of high grade CRCA sheet steel



Contactors & Relays

DC Contactors

DC Mill Duty Contactors have been designed keeping in view the arduous environment and duty conditions in the crane application and steel industry as well as industrial control applications.

Range

- Range 15A, 25A, 50A, 150A, 300A, 600A
- Capable of switching AC & DC circuits, operating coil DC energized
- Inductive time limit control eliminates the need for timers, series relays or dashpots
- Compatible DC magnetic overload relays
- Suitable for crane & mill duty applications
- In-built surge suppressors to limit voltage transients



Freedom Series

Freedom Series Contactors

Freedom Series Contactors provide a lot more freedom in flexibility, maintenance and cost effectiveness.

- Conforms to IEC 60947-4-1 / IS-13947-4-1
- CE marking
- Wide Range CR, 6A to 1200A
- AC & DC Control Voltages
- 3/4 Pole
- Common Snap on Accessories up to 73 A
- DIN rail up to 73A
- Minimum downtime & ease of maintenance

- Low energy consumption coil with 3 Terminals
- Non-hygroscopic body material
- Suitable for adverse environmental conditions
- Low contact bounce
- Special contactors for Capacitor Switching upto 25 kVAR *UL Approval upto 73 Amp.





Freedom Series - Over Load Relays

Specifications & Features

- Conforms to IS: 13947-4-1
- 24 Setting ranges from 0.1 upto 80 Amp
- Single phasing protection
- Reset selection-auto / manual
- Ambient temperature -25°C to $+55^{\circ}\text{C}$
- Potential free contacts (1NO+1NC)
- · Contactor mounting & independent mounting facility
- IP20 protection against direct touch with live parts Tripping class: 10 A



CITATION SERIES Citation Contactors

Citation 3 Pole Contactors are designed for high performance and easy maintenance. These are suitable for mill duty, crane control, motor control centres, switching of solenoids, capacitor banks and for lighting & heating circuits.

- Conforms to IEC-158
- Range 32A, 40A, 70A.
- 3 Pole
- Rugged Design

- Total front maintainability
- Wide ambient temp. range -50°C to +55° C
- Mechanical Interlock / Auxiliary Contacts facility



NHD SERIES NHD - 2 Pole Contactors

The single phase power control, 2 Pole Power Contactor type "CPG" is based on the proven design of NHD Contactors that has enjoyed the confidence of customers across various segments.

Specifications & Features

- Conforms to IEC60947-4-1 / IS 13947-4-1
- 2 Pole power contactor 16A, 25A, 40A
- Compact and Robust Construction using high grade mouldings
- Weld resistant silver alloy contacts
- Encapsulated coil for high withstand capacity







NHD 4 Pole Contactors

NHD, 4 Pole Contactors have definite use with many distinctive features. They offer choice of add-on auxiliary contact block with configuration 1NO+1NC or 2NO+2NC.

- Current ratings : 16A, 25A, 40A
- · No. of Poles: 4
- Encapsulated coil for high withstand capacity
- Compact and robust construction using high grade mouldings





Definite Purpose Contactors

Specifications & Features

- Quick connect plugin terminals
- Specially designed low VA coil
- Range: 25 & 40 A SP & SPN versions



Electronic Over Current Relay

Specifications & Features

- Normally operated 0.5 to 6A
- 60 A to 960A
- CT operated

Protection
 Over load Current, Locked Rotor
 Phase loss, Phase reversal, Phase Imbalance,
 Ground Fault (Optional on selected models)



Citation M Overload Relays

Citation M, bimetal, overload relays provide complete protection to three phase motors against overloads, single phasing and severe unbalanced voltages.

Specifications & Features

- Conforms to IS 13947-4-1
- Wide range 0.195 A to 600 A in 21 settings
- Sensitive single phasing protection

- Temperature compensated up to 55°C ambient
- On site manual / auto reset selection



Electric Motors & Cables

ENDURA Induction Motors

- Complete Range: 0.12 HP to 425 HP
- Robust design available in High Efficiency and Premium Efficiency versions
- Corrosion-resistant stator frames and end-bracket hardware
- High efficient stator laminations with superior low loss CRNGO steel
- Inverter Ready* standard motors with unique Dual Coat copper winding wire
- Designed for 50°C ambient temperature for the entire range.
- Temperature rise restricted to class B limit
- Six terminal construction across the range
- Various mounting possibilities
- **(€** marking





Wires & Cables

Specifications & Features

3 Core Flat Cables

- Range 1.0 sq. mm to 50 sq. mm
- Suitable for 15 to 70° C
- Individual conductors from electrolytic copper drawn, bright annealed and geomatrically bunched, ensures uniform insulation.
- Standard packing of 100m (coil), 500m and 1000m in drums for both flat & round cables.

Single & Multicore PVC Flexible Cables

- Range for 1C-0.5 sq. mm to 150 sq. mm
- Range for 2C -0.5 sq. mm to 10 sq. mm
- Range for 3C -0.5 sq. mm to 4 sq. mm
- Individual conductors from electrolytic copper drawn, bright annealed and geomatrically bunched, ensures uniform insulation.
- Standard packing of 100m (coil), 500m and 1000m in drums for both flat & round cables.
- Available in Red, blue, yellow, green, grey, black, white, and yellow/green



Motor Starters

BCH DOL Starters

BCH Direct-on-Line Starter meets the need of high reliability in a wide range of applications. They are for Switching AC motors upto 30 HP at 415V three phase and offer complete motor protection against overloads, single phasing and severe unbalanced voltages, all in accordance with IEC specifications.

Specifications & Features

- Range upto 30HP
- Excellent temperature compensation between -10°C and +80°C (+55°C max. ambient).
- Selection of manual or automatic resetting for overload relay.

Single phase starters available with pole contactor + 2P relay (upto 20A)



BCH Star Delta Starters

BCH Star Delta Starters are for controlling AC motors up to 250HP (185 KW) 415V three phase and offer complete motor protection against overloads, single phasing and severe unbalanced voltages, in accordance with IEC specifications.

Specifications & Features

- Range upto 250HP
- · CE Marking.
- Fully automatic & semi automatic versions
- Excellent temperature compensation between -10°C and + 80°C (+55°C max. ambient).
- Selection of manual or automatic resetting for overload relays.
- Manual Star Delta Starter is available from 3hp to 15hp.



Submersible Pump Starters

Specifications & Features

1 Phase applications

- 1- Phase SPS with Mini DOL upto 11-20 Amp relay range for oil cooled submersible pumps
- 1 Phase SPS with 2 Pole Contactor & Relay upto 17.4-24.0 Amp relay for water cooled sub pumps
- Wide range of variants to cater the need of all customers
- Wide band encapsulated coil (160-220 V)
- Complete isolation of supply to motor when starter is off.

3 Phase applications

- Range DOL upto 17.4-24 A
- Range Star Delta upto 22-30A
- Conforms to IEC 60947-4-1
- Phase reversal prevention
- Phase imbalance prevention
- Single phasing prevention
- Heavy duty 4 pole contactor
- · Economy, Standard & Premium version
- Auto / Manual mode
- · Voltmeter with phase voltage measurement
- Motor On & Trip indication





Mini Manual Starters

The Mini Manual Starter is specially compact and has all the characteristics of a top quality starter embodying a complete measure of protection for both motor and operator.

Specifications & Features

- 1 Phase versions : upto 3HP
- 3 Phase versions : upto 10HP
- Also available with UV coil (1 phase / 3 phase)
- Compact size
- Trip free mechanism



Capacitors & Power Distribution

LT Power Capacitors

- For Power Factor correction system range : 1 KVAR to 25 KVAR, 415 VAC/ 440 VAC
- Type : MPP CN
- Very low watt losses, very low temprature rise
- Available with Discharge resistors to reduce the residual voltage to safe level of 50 V in one minute.
- BCH Capacitors are fixed with non toxic polyurethane resin with excellent heat dissipation properties



Power Distribution

PLUGS & SOCKETS PS - Plugs & Sockets

Specifications & Features

- Conforms to EN / IEC-60309
- PS16 IP44

Plugs: 20A 3 / 4Pin Sockets: 20A 3 / 4Pin Boxes: 20A, with Provision for SP/ DP MCB

• PS32 IP54

Plugs: $32A \ 3 \ / \ 4 \ / \ 5 \ Pin$ Sockets: $32A \ 3 \ / \ 4 \ / \ 5 \ Pin$ Boxes: 32A, with Provision for FP MCB / RCD

- Unique Spark-less contact technology for long life
- CE Marking
- Universal and flush mounting boxes
- Self locking design ensuring complete safety
- Applications : Single Phase. Three Phase Loads



SS - Plugs & Sockets

Industrial Plugs and Sockets combine simplicity, convenience and reliability through their unique design which makes use of the concept of spring-loaded butt-type contacts instead of the conventional concept of pin-and-sleeve type.

Specifications & Features

POWER CONTROL

Rated voltage 500V AC and DC 500V AC and DC

Thermal current (Ith) 30A 3/4/5 Pin 12A 12 Pin • Auto closing lid





DS Decontactors

DC Decontactors, Plugs & Socket are with integral switching device. This design has overcome inherent disadvantages of conventional plug & socket rendering them extremely safe, reliable and long lasting.

Specifications & Features

Conforms to IEC 60309Type: DS1 DS3 DS6 DS9

• Rated Current (le): 16A 32A 63A 125A

• IP Category : IP 65

 Integral switching device which eliminates cumbersome interlocked switch socket outlets

- Live contacts are not accessible
- · Built in Interlocking
- A safety lid cover for socket
- Safety disc / socket shutter provides dead front
- Self aligning & wiping contacts
- Silver tipped butt type contacts



Power Receptacles

- Single / Multiple Outlet ratings: 16 A, 32 A, 63 A, 125 A
- Option of back up protection MCCB / SDFU
- · Loop In Loop Out facility
- · Powder coated boxes with excellent finish & durability



FUSE SWITCH UNITS Switch Disconnector Fuse

Switch Disconnector Fuse are designed for Industrial applications, Conforming to IEC-60947-3 / IS-13947-3.

Specifications & Features

- Ratings : 100A, 125A, 160A (AC 23A)
 200 A being lanched shortly.
- Versions : TP/TPN, Fuses : DIN/BS,
- Quad Break Contact System for Longer life
- Visible contact indication through contact carrier
- · Door Interlock with defeat facility and padlocking
- Higher clearance and creepage distance ensuring complete safety
- Accessories :
 *Terminal Shrouds , *Auxiliary Contact Blocks



Fuse Switch Units

Fuse Switches type FSO and FSI are designed to meet the requirements of manually operated switches and Fuse Switches. These cover applications as safety switches, for distribution and motor control.

- Conforms to IEC-408 / IS 4064
- Rating: 32 A, 63 A (3 pole)
- High Electrical & Mechanical endurance
- Accessories Door Interlock with Defeat Mechanism, 1NO + 1NC aux. contacts.





Control Devices

Electronic Sensors

A wide range covers high performance Photo, Inductive, Capacitive and Magnetic Sensors.

Specifications & Features

Inductive Proximity Sensors

- Size : 4 to 30 mm
- Sensing range: 0.8mm to 15mm
- Models with cable or connectors
- Wide range of outputs

Special Models

- Short housing models
- Increased range models

Capacitive Proximity Sensors

- Size: 18 to 30mm
- Sensing range: upto 25mm
- High stability temperature range
- · High immunity against interference

Photo Sensors

- M18 cylindrical photoelectric sensors
- Diffuse reflective
- Retro reflective
- Thru Beam Emitter-Receiver
- Models with cable or connector arrangement

Magnetic Sensors

- Hall effect Magnetic Sensors
- Reed Contact Magnetic Sensors
- Namur Sensors
- Photo Sensors in Rectangular Housing
- Optical Barrier
- Sensors for specialised applications



MINI Limit Switches

- Conforms to IEC 60947-5-1
- Compact design requiring less mounting space
- Zinc Die-cast base & high end polymide cover
- Dust proof, water proof, and oil resistant
- · Long mechanical & electrical life
- Wide range of operating heads



Precision Limit Switch

LIMIT SWITCHES Heavy Duty Range

Heavy duty Limit Switches keep operating in highly contaminated atmosphere, extremely high shock and vibration conditions.

Specifications & Features

- Conforms to IEC-60947-5-1
- · CE Marking
- Contacts: 1 NO + 1 NC / 2 NO + 2 NC
- · Rugged and reliable design

- Choice of 18 operating heads
- Oil Tight, Water Tight and Dust Proof (IP67)
- Screw terminal / prewired

Precision range Limit Switch are best suited for applications where space is a priority. Compact in size with wide choice of heads for all sensing needs.



INTERFACE DEVICES Foot Switches

Foot Switches are designed to open and close AC or DC pilot circuits. The contact mechanism has Single Pole Double Throw twin break, silver contacts 1 NO \pm 1NC $\,$ enclosed in moulded phenolic block.

- Conforms to IEC-60947-5-1
- 2 and 3 position
- · Option of latching unit

- 1NO+1NC / 2NO+2NC / 4NO+4NC contact blocks
- Heavy duty and rugged design





Push Buttons & Indicating Lights

Oil Tight Push Buttons and Indicating Lights in 30.5mm & 22.5mm, offers the widest choice. They are heavy duty for industrial use ideally suited for machine tools, control panels and motor control centres.

Specifications & Features

30.5mm Range

• Actuators : Standard flush button

: Long button

: Mushroom head

: Selector actuator

: Cylindrical lock

Station
Contact Block
Start/Stop push button
1NO+1NC, 2NO, 2NC

• Alum. diecast enclosure : One button

: Two buttons

: Three buttons

• Oil tight indicating lights : Without lens

: Direct type

: Transformer type



FLEXI 22 Push Buttons & Indicating Lights 22.5 mm

Push Button & Indicating Lights 22.5mm are oil tight, water tight, corrosion - resistant, space saving designs with modular / snap fit construction that makes the assembly fast and easy.

Specifications & Features

- Conforms to IEC 60947-5-1
- IP 65 Degree of Protection.
- Operating Temp -20 to 60 C.
- Chrome plate metal bezel.
- Modular Screwless construction.
- Modular Assembly save time.

Led indicators

• Standard with surge & low voltage glow protection

Selector operators

• Illuminated, non illuminated & key operated

Push buttons

- Flush & extended
- Illuminated & non Illuminated
- Mushroom type

Light source units

- · Direct type
- Resistance type
- Transformer type



Electronic Timers / IBT Timer

A wide range of Electronic Timers & Devices that are ideally suited for sequence control and various other applications.

Specifications & Features

- Multi function, Multi-range, Multi voltage
- · Calibrated scale for easy time setting
- Compact dimension

- LED indication for power and relay status
- DIN rail mounting or base mounting



Time Delay Relays

Electropneumatic Time Delay Relays have been designed keeping industrial performance in view and are ideally suited for machine tools, sequence controls and various other applications, suitable for quick, adjustable and dependable time delays required between related applications. They reset as fast as 0.02 seconds and are perfect for high speed operations.

- Timing range : 0.05 to 30 seconds
 - 0.05 to 60 seconds 0.05 to 180 seconds
- Reset time: 0.02 seconds for AC, 0.10 sec for DC
- Special Time Delay Relays available for Railway applications





AC & DC Brakes

SOLENOIDS & AC BRAKES AC Brakes / AC Solenoids

AC Solenoid operated brakes type 'S' are designed for long life, easy installation and minimum maintenance. They are electrically released and spring applied providing 'Fail-Safe' operation.

Specifications & Features

• Sizes : 4", 5.5" & 7"

Hardened steel lever and spring gland

• Cast iron wheel

Solenoid type
 Duty
 Size B
 Size D
 continuous or continuous or intermittent intermittent

• Spring pins

· Inexpensive lining replacement

• Suitable for : Small Cranes, Conveyers, Machine Tools

• Maximum stroke length (mm) 25 31.4 • Pull at rated voltage (Gross)* kg 1.25 6.75



DC Electromagnetic Brakes

Electromagnetic shoe brakes have been designed for heavy industrial and mill duty applications. Use of these brakes is extended to hold the load after stopping the hoist, elevator and similar machines.

- Available in sizes 8", 10", 13", 16", 19", 23" and 30" wheel dia. also in 200, 250, 300, 400, 500, 600 & 700mm wheel dia
- Class of Insulation of coil : Class F

- Insulation voltage : 660 V
- Over the wheel design is the key to reliable performance.
- Self lubricating bushings



Crane Control Solutions

AC Crane Control

This controller provides reversing and plugging operation of slip ring induction motors in heavy duty cranes on Trolley services. Upto 5 motor speeds are achieved in conjunction with a master controller

Specifications & Features

Hoisting Motion

- Plain rotor resistance
- AC Single phase dynamic braking
- · Counter torque lowering
- Opotor Control
- · Creep Speed

DC Crane Control is also available Bridge and Trolley Motion

• Simplified reliable circuitary

- Inverse Time delay Magnetic Overload protection
- Time Limit acceleration
- Speed Control by series resistors
- No Volt protection
- Special Unique plugging circuit with a voltage relay
- CRCA Sheet steel construction of the panel
- 7 Tank pretreated panels for extremely long life
- Panels for indoor and outdoor protection





Thyristor Control Panels & Battery Chargers

- DC drives-upto 3000A converter rating
- Full wave fully controlled, 6 SCRs
- Positive balanced gatting.
- Adjustable current limit 10% to 200%
- · Battery charges of various AH ratings.
 - a) upto 200 AH for Float-cum Boost for 24V/48V
 - b) upto 300 AH for Float and Boost for 24V/48V/110A/220VDC.





Punch Grid Resistors & Panels, NGR & DBR

Range

- Speed Control Resistors
- Starting Resistors for AC and DC Motors
- Dynamic Braking Resistors
- Neutral Grounding Resistors (upto 11KV)

Specifications & Features

Special Chromiun Steel Alloy (AlS1406) for:
 a) Higher resistivity (approx 70% higher than others)
 This results in overall light and compact unit
 b) Low temperature coefficient (approx 72% lower than others)

This means negligible change in resistance values despite grid temperature variations (very important parameter in applications like crane controls)



Auto Transformer Starters

Good Starting Torque and current performance

Possibility of adjusting starting parameters

No break in supply to the motor during starting

Best suited when maximum reduction of Inrush current is desired or motor requires longer acceleration time with Good starting torque

- Blowers
- Pumps
- Compressors

- Extruders
- Crushers

Specifications & Range

- Available upto 800HP
- Standard Tappings: 50%, 65% and 80%
- Air Cooled design
- 11 Tank pre treated bolted construction enclosure
- Superior gasket

Protections

- Short Circuit
- Overload and Single Phasing (Thru Overload relay)

- Under voltage
- Other protections available on request

Metering & Indication

- Voltmeter with selector switch
- · Ammeter with selector switch
- R,Y,B phase indication
- Motor ON, OFF and Trip indication

Notes





Certification

Awarded to

BHARTIA INDUSTRIES LIMITED

1105, NEW DELHI HOUSE, 27, BARAKHAMBA ROAD, NEW DELHI – 110 601, INDIA.

801, AKASH DEEP, 28A, BARAKHAMBA ROAD, NEW DELHI - 110 001, INDIA. Manufacturing Site:

MATHURA ROAD, FARIDABAD = 121 006, HARYANA, INDIA

BVQI certify that the Quality Management System of the above organisation has been audited and found to be in accordance with the requirements of the standards detailed below

STANDARD

ISO 9001:2000

SCOPE OF SUPPLY

Corporate Office & Branch Office:

MARKETING AND SERVICING OF LOW-YOL TAGE SWITCHGEAR AND SERVICING OF LOW-YOL TAGE SWITCHGEAR AND CONTROL SERVICING OF LOW-YOL TAGE SWITCHGEAR AND SERVICING OF LOW-YOL TAGE OF THE CONTROL SAUTOMATION PRODUCTS AND ENCLOSURES. INDUSTRIAL CONTROL & AUTOMATION PRODUCTS AND ENCLOSURES.

MEDITARMITICAL SILE.

INDUSTRIAL CONTROL & AUTOMATION PRODUCTS AND ENCLOSURES.

Manufacturing Site:
Missis Missis Site:
Missis M

Original Approval Date: 08 September 2005 nisation's Quality Management System,

Subject to the continued satisfactory operation of the or subject to the continued satisfactory operators of the organi-this certificate is valid until. 08 September 2008

To energe that certificate variously please call: TV 1 C4 900900300.

Further charifications reparking the scope of this certificate and the applicability of the Quality Management System. To check this certificate validity please cell: +91 22 56956300 infinguments may be optimined phe consultated the outsitional infinites commentees assessed on a second-order and

28 September 2005

*MANAGENG INSCIPROCESSED GRADA, WILL Sell, "MANAGENIA CLESCESS" eth. FROM, at Labouria Exercis, Scalabel Marcel: Marg. Stil. Mar. Viker Rund, And Berre Hant, "Marshes — Jell 1972, Judia. Certificate Number: 177848



800

ВСН	ELECTRIC	LIMITED	Visit us at : www.bchindia.com	Representative	
Corporate	Office/International Div.: 110	5, New Delhi House, 27, Bara	akhamba Road, New Delhi - 110 001(India)		
Tel.: +91-1	1-23316029/51511350 Fax	: +91-11-23715249 E-Mail :	exports@bchindia.com		
Registered	Office : Block 1E, 216, Acha	arya Jagadish Chandra Bose	Road, Kolkata - 700 017		
Works : 20	/4, Mathura Road, Faridabad	d - 121 006 (Haryana)			
Tel. : +91-1	29-4063000/4061026 Fax :	0129-2304024			