

O/E/N India Limited

✿ *We make electronics work*

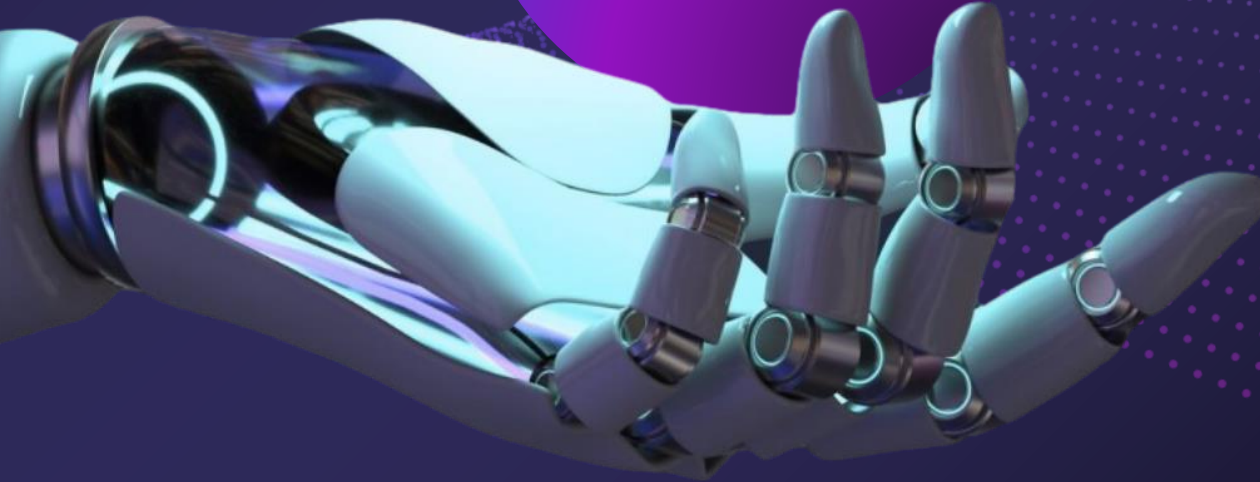
AUTOMOTIVE PRODUCT PRESENTATION





• 1968-2018 •

CELEBRATING
'FUTURE'



Market Leaders in India for Relays & Switches



Established in **1968**
with technical
collaboration of OAK
Industries



50+ years of
manufacturing
experience in relays,
switches & custom-
built assemblies



State of art
production facilities:
Two each in Kochi &
Pune



Manufacturing area of
31,000 sq. Meters.



O/E/N brand known for
quality, reliability &
innovation



Strong presence in
automotive, industrial
& other strategic
market segments



ISO 9001, IATF 16949,
ISO 45001, OHSAS
18001, AS9100D
certifications

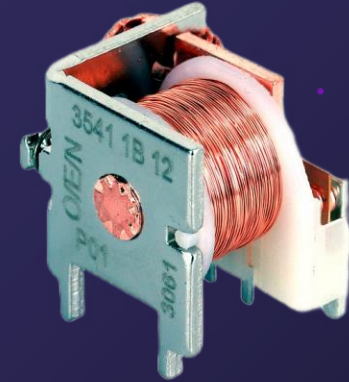


Series 35 Relay

- Direct PCB Mountable
- Miniature Size
- Max Switching Current 50A

Applications:

Direction Indicators, Wiper Controls, Lamp Controls, Rear Window Heating, Horn Controls, Starter Motors, Security Systems



Rated for 30A@12VDC or 10A@24VDC. Available in 1 Form A, 1 Form B, 1 Form C configurations

Series 35HT Relay

- Direct PCB Mountable
- High Performance
- Heavy Duty
- Extra Braided Wire for enhanced current rating
- Max Switching Current 300A-Make/70A-Break Condition

Applications:

Glow Plug Timers, Engine Cooling Fans, Heating Elements,
Starter Solenoid Switches



Rated for 70/50A Glow Plug load @ 12VDC. Available in 1 Form A configuration

Series 3572 Relay

- Direct PCB Mountable
- High Performance
- Heavy Duty
- IP 67 Protection
- Max Switching Current 100A



Applications:

Direction Indicators, Air Conditioning Systems, Body Controllers, Head Lamp Control, Ventilation Motors, Security Systems

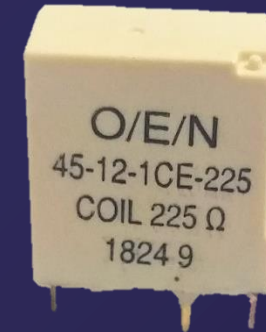
Rated for 45/30A@12VDC or 20/10A@24 VDC. Available in 1 Form A, 1 Form C configurations

Series 45 Relay

- Compact in Size
- Single and Dual Versions
- IP 67 Protection
- Max Switching Current 30A

Applications:

Window Motors, Seatbelt Pre-Tensioner, Sunroof Motors, Seat Adjustment Motors, Door Locking System, Immobilizers



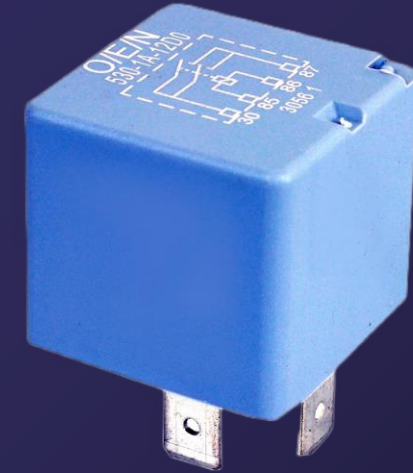
Rated for 20A@12VDC. Available in 1 Form A, 1 Form C configurations

Series 53 Relay

- High Performance
- Limiting Continuous Current 70A
- 6.3mm Terminals
- PC Version Available
- Max Switching Current 240A

Applications:

A/C Compressor, A/C Blower, Engine Cooling Fan, Starter Motor, Rear Window Defogger, Battery Disconnection, Radiator Fan



Rated for 70A@12VDC or 35A@24VDC. Available in 1 Form A configuration

Series 53-PT Relay

- High Performance
- Limiting Continuous Current 100A
- 9.5mm Power Terminals
- PC Version Available
- Max Switching Current 300A

Applications:

Starter Relay, Radiator Fan, A/C Compressor, A/C Blower, Rear Window Defogger, Battery Disconnection



Rated for 100A@12VDC or 50A@24VDC. Available in 1 Form A configuration

Series 53H Relay

- High Performance
- High Voltage Switching – 145VDC
- 9.5mm Power Terminals
- Max Switching Current 150A

Applications:

Hybrid & Electric Vehicle, Pre-Charge Relay, Charger Interlock Relay



Rated for 40A@60VDC, 5A@145 VDC. Available in 1 Form A configuration

Series 54 Relay

- Limiting Continuous Current 70A
- Dual Contact Design for enhanced rating
- Direct PCB Mountable
- Max Switching Current
- 300A Make / 70A Break condition

Applications:

Glow Plug Timers, Start-Stop, Starter Safety, Engine Cooling Fans, Heating Elements, Heavy Duty Direction Indicators



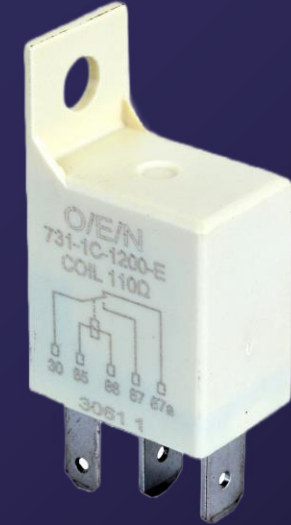
Rated for 70A@12VDC or 35A@24VDC. Available in 1 Form A configuration

Series 73 Relay

- High Performance Micro ISO Relay
- Standard (20A) and High Current versions (35A)
- 4.8 & 6.3mm Terminals
- IP 67 Protection optional
- Max Switching Current 120A

Applications:

Head Lamp Control, Starter Motors, Defogger, Radiator Fan, A/C Controls



Rated for 35/20A@12VDC or 20/10A@24VDC. Available in 1 Form A and 1 Form C configurations

Series 74 Relay

- High Performance Mini ISO Relay
- 6.3mm Terminals
- Current Rating 40A
- IP 67 Protection optional
- Multiple Contact Configuration

Applications:

Horn Control, Starter Motors, Gear Neutral Safety, Defogger, Radiator Fan, A/C Controls, Security Systems



Rated for 40/30A@12VDC or 20/15A@24VDC.

Available in 1 Form A, 1 Form B, 1 Form C, 1 Form U & 1 Form T configurations

Series 74H Relay

- High Performance Mini ISO Relay
- 6.3mm Terminals
- Max Switching Current 120A

Applications:

Hybrid & Electric Vehicle, Battery Chargers



Rated for 25A@36VDC, 20A@48VDC, 15A@72 VDC, 7A@110VDC.

Available in 1 Form A & 1 Form C configurations

Series 74EV Relay

- Suitable for voltage levels up to 450VDC
- Pre-Charge currents up to 20A
- Limiting Break currents up to 20A
- Bracket Mounting, PCB Mounting and Plug in type available

Applications:
Capacitor Pre-Charge



Rated for 20A@450VDC. Available in 1 Form X configuration

Series 82 Relay

- Ultra Small High Voltage Relay
- PCB Mountable
- Low Coil Power 0.6W
- IP 67 Protection
- Max Switching Voltage 450VDC
- Magnetic Blowout feature eliminates the risk of Arc induced contact damage



Applications:
Capacitor Pre-Charge Relay for Electric Vehicle

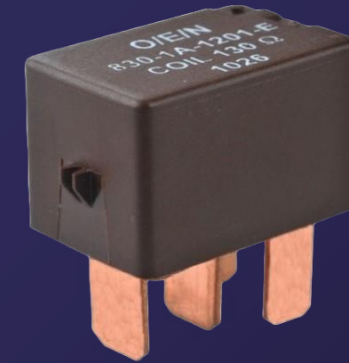
Rated for 10A@450VDC. Available in 2 Form A configuration

Series 83 Relay

- Low Profile
- Low Coil Power 0.72W
- IP 67 Protection
- Max Switching Current 100A

Applications:

ECU Controls, Electronic Fuel Pump, Lamp Controls, A/C Controls, Fan Controls, Tail Lamp



Rated for 20A@12VDC. Available in 1 Form A configuration

Series 84 Relay

- Limiting Continuous Current 100A
- IP67 Protection
- Screw Type terminations for contacts
- Shrouded Coil Terminals ensures total isolation from Contact Terminals

Applications:

Engine Pre-heating, Radiator Cooling Fan, Exhaust Control, Oil Pump, Heater Control, Battery Disconnection, Starter Motor, Braking System(Electromagnetic Retarder)



Rated for 100A@12VDC & 60A@24VDC. Available in 1 Form A configuration

Series 84EH Relay

- Limiting Continuous Current 200A
- IP67 Protection
- Screw Type terminations for contacts
- Shrouded Coil Terminals ensures total isolation from Contact Terminals



Applications:

Engine Pre-heating, Radiator Cooling Fan, Exhaust Control, Oil Pump, Heater Control, Starter Motor, Braking System(Electromagnetic Retarder), Battery Disconnection

Rated for 200A@12VDC & 100A@24VDC. Available in 1 Form A configuration

Series 84EV Relay

- Max Switching Voltage 250VDC
- IP67 Protection
- Screw Type Terminations for Contacts
- Shrouded Coil Terminals ensures total isolation from Contact Terminals

Applications:

EV Vehicles–Battery Charger, Braking System(Electromagnetic Retarder)



Rated for 150A@72VDC & 25A@250VDC. Available in 1 Form A configuration

Series 86

Battery Disconnect Relay

- Contact Configuration: 1 Form X
- DC Coil Versions
- Resistor/Free Wheeling Diode (Optional)
- Limiting making current up to 2000A
- Time Delay feature (Optional)
- Vibration Resistance 10G, Shock Resistance 40G
- IP67 Protection



Applications:

Disconnecting Battery to prevent accidental short circuit fires,
Dual Battery Swapping, Battery Deactivation when vehicle is not
used for an extended period, Pre-Heating Systems

Rated for 275A@13.5VDC, 275A@ 27.5VDC, 150A@27.5VDC

Series 93 Relay

- Compact Size
- PCB Mountable and requires 50% less builtup area as compared to Series 3572
- Low Coil Power 0.82W
- IP 67 Protection
- Max Switching Current 250A



Applications:

Smart Junction Box, Blower Fan, Cooling Fan, Fuel Pump, Glow Plug

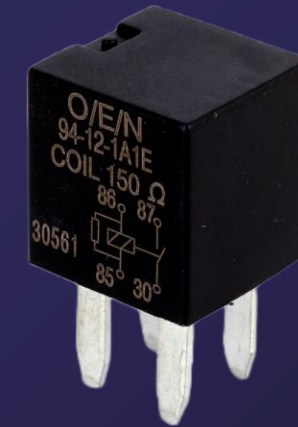
Rated for 40A@12VDC. Available in 1 Form A configuration

Series 94 Relay

- High Performance
- Light Weight -11gms
- Micro 280 Terminal layout
- IP 67 Protection
- Max Switching Current 120A

Applications:

Wiper Speed, AC Clutch, Fuel Pump, Fog Lamp, Head Lamp-Low Beam/High Beam, Wash Pump, Horn, Wiper



Rated for 20A@12VDC. Available in 1 Form A configuration

Series 160 EV Contactor

- Contact Rating of 250A at 450VDC
- Gasless Technology for Arc Quenching
- Limiting Continuous Current 250A @ 85 deg C
- Maximum Short Circuit Current of 6000A
- With Economiser

Applications:

Main Contactor, Fast Charging



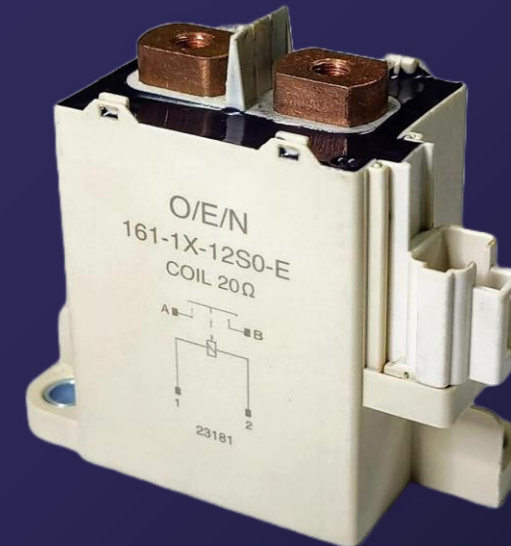
Rated for 250A@450VDC. Available in 1 Form X configuration

Series 161 EV Contactor

- Contact Rating of 150A at 150VDC
- Gasless Technology for Arc Quenching
- Economiser version available
- IP 67 Protection
- Limiting Continuous Current 200A
- Maximum Short Circuit Current of 3500A

Applications:

Main Contactor, Fast Charging



Rated for 150A@150VDC. Available in 1 Form X configuration

Series 162 EV Contactor

- Contact Rating of 175A at 450VDC
- Gasless technology in arc quenching
- Limiting continuous current 175A @ 85 deg C
- Maximum Short Circuit Current of 5000A
- With Economiser

Application

- Main Contactor
- Battery Management System
- Fast Charging



Rated for 175A@450VDC. Available in 1 Form X configuration

Series 163 EV Contactor

- Contact Rating of 120A at 120VDC
- Gasless technology in arc quenching
- Maximum Short Circuit Current of 4300A
- With Economiser

Application

- Main Contactor
- Battery Management System
- Fast Charging



Rated for 120A@120VDC. Available in 1 Form X configuration

Relay Modules

- Time Delay Modules
- Starter Safety Modules
- LED Flasher
- Glow Plug Timer
- Latching Modules

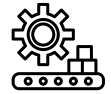
Application:

Seat Logic, Starter safety, Glow plug etc.

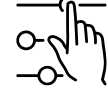


Rated up to 40A@12VDC and available in 5 Pin and 6 Pin configurations

Why O/E/N



Over five decades of specialized expertise in development and manufacture of electromechanical components & strategic electronic products – A legacy brand



Innovative product design and development team to convert ideas and concepts to customized switching solutions



Multi-locational state-of-the-art manufacturing facilities with fully automated & semi-automated lines



Relentless focus on product quality and reliability



Customer centric approach that has been rewarded with an ever-expanding base of loyal customers in India and abroad



Backed by over five decades of proven manufacturing and technological excellence, we are continuously striving to match and exceed the expectations of our customers and business associates.

Connect with Us!!

 www.oenindia.com

 marketing@oenindia.com

