DC/DC CONVERTERS

ADC01.H (DIN rail, 48V/24V, 100W)

ADC02.H (DIN rail, 24V(48V)/150V, 100W)

TIC100.H (DIN rail, 100W)

TIC200.H (DIN rail, 200W)

ADC01.H (DIN rail, 48V/24V, 100W)

- **Nominal input voltage 48V DC**
- **Output voltage 24V(4A) / 100W output power**
- **Galvanicaly isolated output 1.5kV**
- **High efficiency, up to 92%**
- **Doubled output terminals + PE**
- **Mounting type: DIN rail**

DC/DC converters type ADC01.H convert 48V DC input voltage to 24V DC output voltage. Output is galvanicaly isolated from the input, output terminals are doubled. The LED on the front panel indicates the presence of the output voltage.

Model specification:
- ADC01.H ZZ_XXYY - H = designed for DIN rail mounting, ZZ = nominal input voltage, XX = nominal output voltage, YY = max. output current

The installation position is on a horizontal DIN rail, venting slits are above and below. The input connection is through a removable plug at the bottom of the converter, the output voltage connection is on the top of the converter. Output terminals are doubled and with a drafted PE (protective earth) terminal. The converter allows cable connecting with a conductor cross section up to 2.5mm2. Using the part no. IP.0000.000.04 mounting kit, it is possible to install the ADC01.H into 19" frames.

MODEL SPECIFICATIONS	ADC01.H 48_2404 48V/24V(4A)
Input voltage	48V(35 – 72V)
Output voltage	24V(4A)
Output power	100W
Efficiency	92%
Insulation strength	min. 1500V
Operating temperature	-25 - +60°C
Output voltage stability	1%
Local signalization	LED
Remote signalization	-
Air flow	Convection
Short circuit protection	Yes
Overtemperature protection	85°C
Undervoltage protection	Yes
Mounting type	DIN rail
Dimensions W x H x D (mm)	71 x 90 x 68 mm
Weight	0.2kg
Degree of protection	IP20
Part No.	IP.1431.633.200

ADC02.H (DIN rail, 24V(48V)/150V, 100W)

- **Nominal input voltage 24V(48V) DC**
- **Output voltage 150V / 100W output power**
- **Galvanicaly isolated output 1.5kV**
- **High efficiency, up to 90%**
- **Doubled output terminals + PE**
- **Mounting type: DIN rail**

DC/DC converters type ADC02.H with 24V (48V) DC input voltage are designed to supply devices with input voltage 100-230V~50/60Hz up to 100W without needs a DC/AC inverter. For this purpose, a part of the delivery is a special cable for supplying of this device. Output is galvanicaly isolated from the input. The LED on the front panel indicates the presence of the output voltage.

Model specification:
- ADC02.H ZZ_XXYY - H = designed for DIN rail mounting, ZZ = nominal input voltage, XX = nominal output voltage, YYY = max. output current

The installation position is on a horizontal DIN rail, venting slits are above and below. The input connection is through a removable plug at the bottom of the converter, the output voltage connection is on the top of the converter. Output terminals are with a drafted PE (protective earth) terminal. The converter allows cable connecting with a conductor cross section up to 2.5mm2. Using the part no. IP.0000.000.04 mounting kit, it is possible to install the ADC01.H into 19" frames.

MODEL SPECIFICATIONS	ADC02.H 24_150006 24V/150V(0.6A)	ADC02.H 48_150006 48V/150V(0.6A)
Input voltage	24V(18 - 35V)	48V(40-60V)
Output voltage	150V(0.6A)	150V(0.6A)
Output power	100W	100W
Efficiency	90%	92%
Insulation strength	min. 1500V	min. 1500V
Operating temperature	-25 - +60°C	-25 - +50°C
Output voltage stability	3%	3%
Local signalization	LED	LED
Remote signalization	-	-
Air flow	Convection	Convection
Short circuit protection	Yes	Yes
Overtemperature protection	85°C	85°C
Undervoltage protection	Yes	Yes
Mounting type	DIN rail	DIN, 19"
Dimensions W x H x D (mm)	71 x 90 x 68 mm	71 x 90 x 68 mm
Weight	0.2kg	0.2kg
Degree of protection	IP20	IP20
Part No.	IP.1431.633.201	IP.1431.633.204

TIC100.H (DIN rail, 100W)

- **Nominal input voltage 12V (24V, 48V)**
- **Outputs 12V (18V, 24V, 48V) / 100W output power**
- **Galvanicaly isolated output 1.5kV**
- **High efficiency, up to 92%**
- **Overvoltage and Undervoltage protection**
- **DC OK relay contact**
- **Mounting type: DIN rail**

DC/DC converters TIC100.H type convert 12V (24V, 48V) input voltage to 12V (18V, 24V, 48V) with galvanic separation. DC/DC converters are equipped with a local LED indication located on the front panel. Remote signalization is made though the DC OK potential-free relay contact.

Model specification:

- TIC100.H ZZ_XXYY – H = DIN rail, ZZ = nominal input voltage, XX = nominal output voltage, YY = maximum output current.

The installation position is on a horizontal DIN rail, venting slits are above and below. The input, output and OK relay connection is via removable connector at the bottom side with a wire conductor cross section up to 2.5mm2.

MODEL SPECIFICATION	TIC100.H 12_4802 12V/48V(2A)	TIC100.H 24_1208 24V/12V(8A)	TIC100.H 24_2404 24V/24V(4A)	TIC100.H 24_4802 24V/48V(2A)	TIC100.H 24_48120203 24V/48V(1,5A), 12V(2,5A)	TIC100.H 48_1208 48V/12V(8A)	TIC100.H 48_2404 48V/24V(4A)	TIC100.H 48_4802 48V/48V(2A)
Input voltage	12V(10.5 - 15V)	24V(18 - 35V)	24V(18 – 35V)	24V(18 – 35V)	24V(18 - 35V)	48V(35 – 72V)	48V(35 - 72V)	48V(35 - 72V)
Output voltage	48V(2A)	12V(8A)	24V(4A)	48V(2A)	48V(1.5A), 12V(2,5A)	12V(8A)	24V(4A)	48V(2A)
Output power	100W	100W	100W	100W	100W	100W	100W	100W
Efficiency	86%	85%	87%	89%	90%	88%	91%	92%
No load power consumption	140mA	100mA	100mA	100mA	100mA	30mA	40mA	50mA
Insulation strength	min. 1500V	min. 1500V	min. 1500V	min. 1500V	min. 1500V	min. 1500V	min. 1500V	min. 1500V
Operating temperature	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C
Output voltage stability	1%	1%	1%	1%	5% / 1%	1%	1%	1%
Local signalization	LED	LED	LED	LED	2 x LED	LED	LED	LED
Remote signalization	Relay contact Converter ERR	Relay contact Converter ERR	Relay contact Converter ERR	Relay contact Converter ERR	Relay contact 2x Converter ERR 1, 2	Relay contact Converter ERR	Relay contact Converter ERR	Relay contact Converter ERR
Air flow	Convection	Convection	Convection	Convection	Convection	Convection	Convection	Convection
Short circuit protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overtemperature protection	75°C	75°C	75°C	75°C	75°C	75°C	75°C	75°C
Overvoltage protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Undervoltage protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mounting type	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail
Dimensions W x H x D (mm)	45x135x105	45x135x105	45x135x105	45x135x105	45x135x105	45x135x105	45x135x105	45x135x105
Weight (kg)	0.42kg	0.42kg	0.42kg	0.42kg	0.42kg	0.42kg	0.42kg	0.42kg
Degree of protection	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Part No.	IP.1431.633.198	IP.1431.633.120	IP.1431.633.139	IP.1431.633.121	IP.1432.633.177	IP.1431.633.123	IP.1431.633.124	IP.1431.633.191

TIC200.H (DIN rail, 200W)

- **Nominal input voltage 24V (48V)**
- **Output voltage 12V (24V, 48V, 220V) / 200W output power**
- **Galvanicaly isolated output 2.5kV**
- **High efficiency, up to 90%**
- **Overvoltage and undervoltage protection**
- **LED signalization, output voltage trim**
- **Mounting type: DIN rail**

The TIC200.H DC/DC converters convert 24V (48V) input voltage to 12V (24V, 48V, 220V) output voltage with galvanic separation. DC/DC converters are equipped with a local LED indication located on the front panel. There is possibility of output voltage trimming (see specification table).

Model specification:

- TIC200.H ZZ_XXYY – H = DIN rail, ZZ = nominal input voltage, XX = nominal output voltage, YY = maximum output current.

Installation position is on a horizontal DIN rail, venting slits are above and below. Input and output connections are via 6mm2 screw terminals on the top. Output terminals are doubled.

MODEL SPECIFICATION	TIC200.H 24_1213 24V/12V(13A)	TIC200.H 24_2408 24V/24V(8A)	TIC200.H 24_4804 24V/48V(4A)	TIC200.H 24_22001 24V/220V(0.6A)	TIC200.H 48_1214 48V/12V(14A)	TIC200.H 48_2408 48V/24V(8A)	TIC200.H 48_22001 48V/220V(0.6A)
Input voltage	24V(18 - 35V)	24V(20-28V)	24V(20-35V)	24V(18-35V)	48V(42-72V)	48V(42-72V)	48V(42-72V)
Output voltage / current	12V(10-14V)/13A	24V(22-28V)/8A	48V(44-56V)/4A	220V(210-230V)/0.6A	12V(10-14V)/14A	24V(22-28V)/8A	220V(210-230V)/0.6A
Output power	180W	224W	224W	138W	196W	224W	138W
Efficiency	83%	84%	86%	86%	88%	90%	85%
Insulation strength	min. 2500V	min. 2500V	min. 2500V	min. 2500V	min. 2500V	min. 2500V	min. 2500V
Operating temperature	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C	-25 - +50°C
Output voltage stability	1%	1%	1%	1%	1%	1%	1%
Local signalization	LED	LED	LED	LED	LED	LED	LED
Remote signalization	-	-	-	-	-	-	-
Air flow	forced	forced	forced	forced	forced	forced	forced
Short circuit protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overtemperature protection	85°C	85°C	85°C	85°C	85°C	85°C	85°C
Overvoltage protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Undervoltage protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mounting type	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail
Dimensions W x H x D (mm)	105x126x88	105x126x88	105x126x88	105x126x88	105x126x88	105x126x88	105x126x88
Weight (kg)	0.6kg	0.6kg	0.6kg	0.6kg	0.6kg	0.6kg	0.6kg
Degree of protection	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Part No.	IP.1431.633.128	IP.1431.633.129	IP.1431.633.130	IP.1431.633.131	IP.1431.633.132	IP.1431.633.133	IP.1431.633.134