

Q Install Warranty

Q Install loudspeakers are warranted free of defects in materials and workmanship for a period of 2 years from the date of purchase. During the warranty period Q Install will, at its option, repair or replace any product found to be faulty after inspection by the company or its appointed distributor or agent.

Misuse and fair wear and tear and not covered by warranty.

Goods for repair should in the first instance be returned to the supplying dealer. If this is not possible the item/s should be sent carriage paid preferably in the original packaging to Q Install or their appointed distributor for your area and accompanied by proof of purchase. Damage sustained by goods in transit to the repair centre is not covered warranty. Return carriage will be paid by Q Install or their distributor as appropriate.

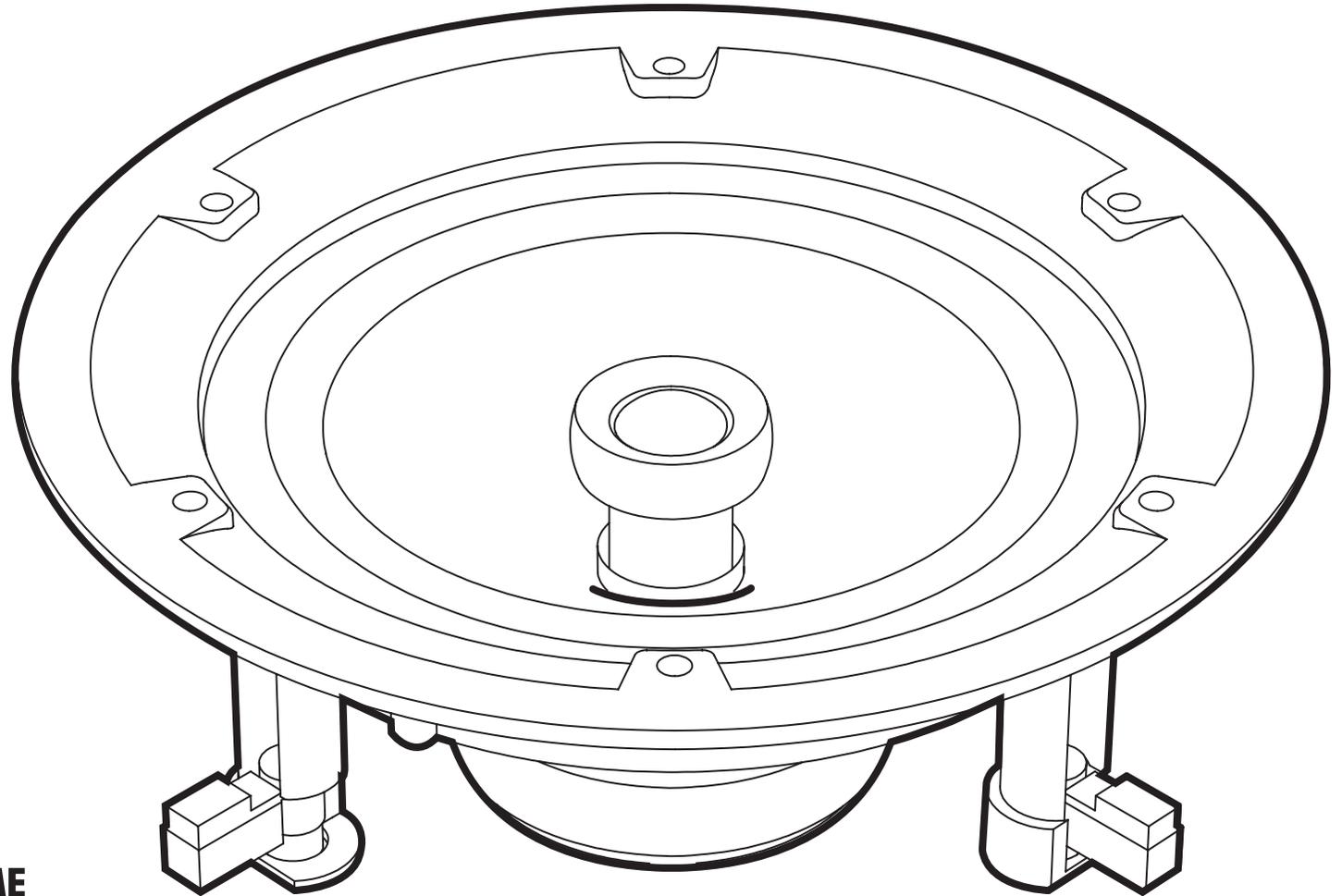
The warranty does not in any way affect your legal rights.



COVERT LOUDSPEAKERS

Quick start installation instructions for Q Install models:

Qi 65C, Qi 65S, Qi 65CP, Qi 65SP, Qi 65C St, Qi 65S St,
Qi 65CP St, Qi 65SP St, Qi 65CW, Qi 65CW St



Appointed Distributor in the UK:

armourHOME

Armour Home Electronics Ltd
Units 7 & 8, Stortford Hall Industrial Park
Bishops Stortford, Herts, UK
CM23 5GZ

Thank you for purchasing Q Install ceiling speakers.
Please take a few minutes to familiarise yourself with the installation procedure.
The speakers are designed for installation into plasterboard ceilings or stud wall cavities.

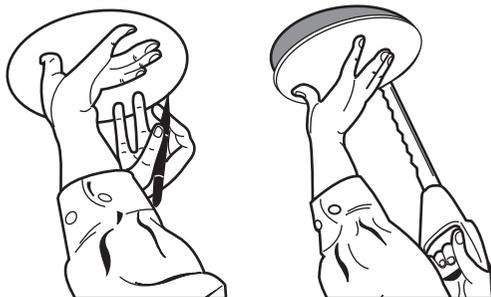
Warning Notices

- Before cutting the mounting hole ensure that there is no conflict with other in-ceiling or in-wall installed items such as pipe work, electrical cabling, gas pipes and supporting joists etc.
- It is important to ensure that the installation complies with relevant building regulations.
- Take care not to apply pressure to the speaker cone and tweeter dome during installation.
- Ensure that the speaker model is suitable for use in the intended application. Only CW models should be used where there are high levels of moisture.

INSTALLING THE SPEAKERS

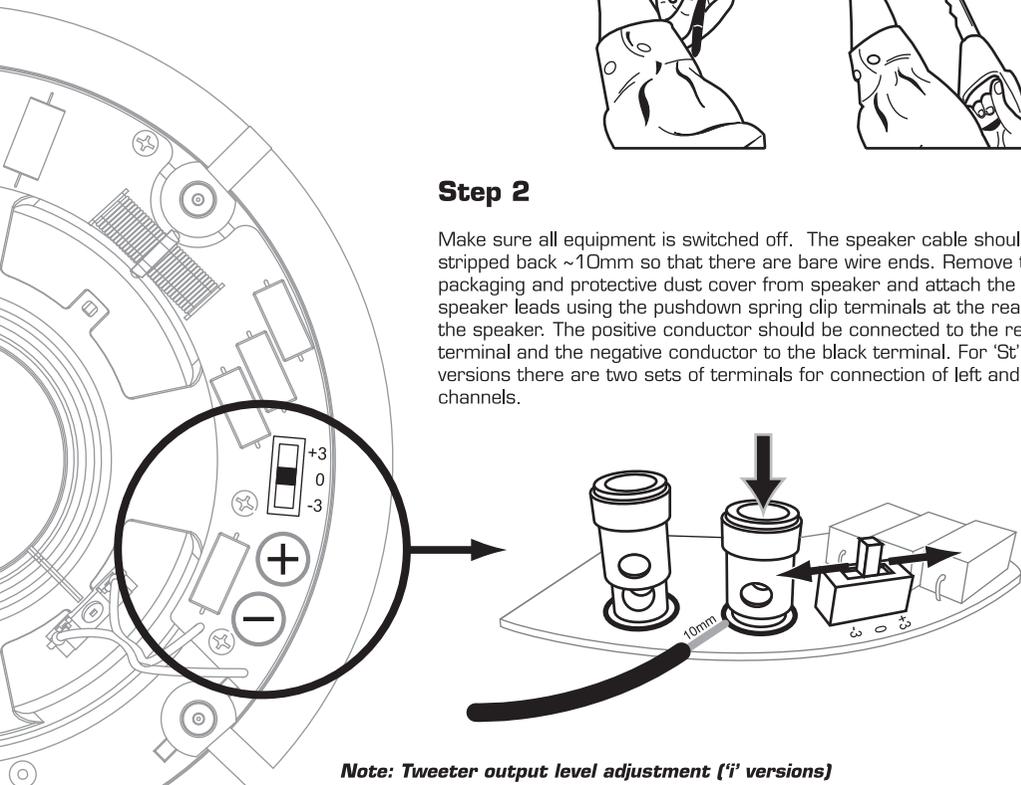
Step 1

Select a suitable mounting location for the speaker taking note of the Warning Notice above. Using the mounting template supplied mark the speaker position and cut the mounting hole.



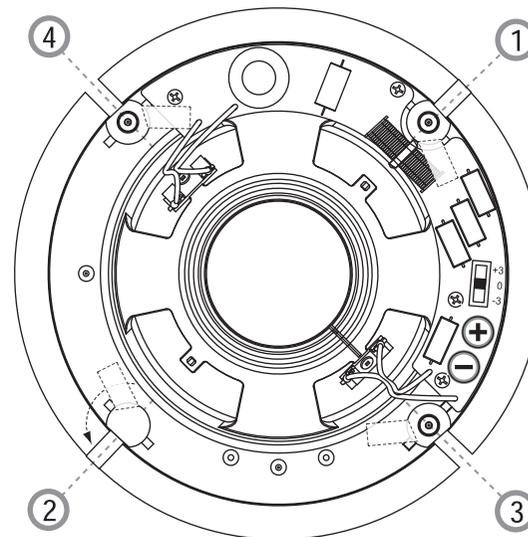
Step 2

Make sure all equipment is switched off. The speaker cable should be stripped back ~10mm so that there are bare wire ends. Remove the packaging and protective dust cover from speaker and attach the speaker leads using the pushdown spring clip terminals at the rear of the speaker. The positive conductor should be connected to the red terminal and the negative conductor to the black terminal. For 'St' versions there are two sets of terminals for connection of left and right channels.



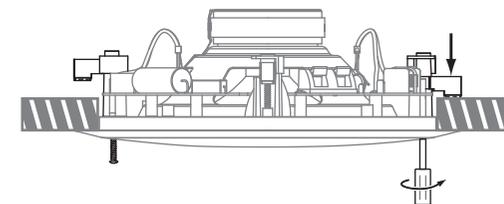
Note: Tweeter output level adjustment ('i' versions)

On some Q Install models the tweeter output level can be increased or decreased using the 3 position switch located at the rear of the product. It is recommended to leave the switch in the '0' position for the initial sound check.



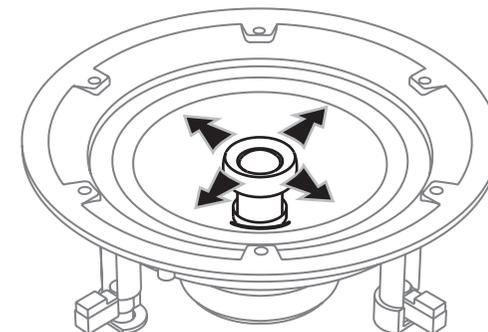
Step 3

Check that each of the 4 swing out clamps are rotated inwards. Position the speaker through the mounting hole and position flush with the ceiling. Whilst holding the speaker in place tighten each of the mounting screws using a No. 2 Pozidriv® screw driver in the order shown in left figure. When an increase in resistance is felt the clamp is in position.



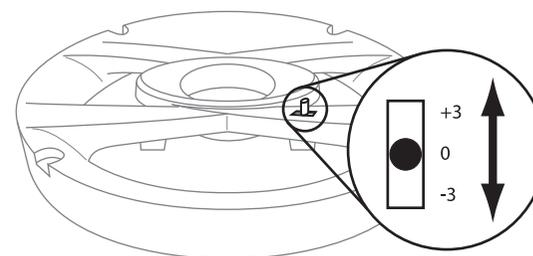
Step 4

Once the speakers are installed they should be tested before the grilles are fitted. All speaker models (other than 'St' Stereo models) feature a swivel tweeter that may be adjusted allowing the high frequencies to be directed towards or away from the normal listening position as required. The tweeter's outer frame (not dome) should be pushed gently to achieve the desired tweeter position.



Note: Tweeter output level adjustment ('CW' versions)

The tweeter output level can be increased or decreased using the 3 position switch located at the front of the speaker. It is recommended to leave the switch in the '0' position for the initial sound check and then adjust if necessary.



Step 5

For speakers featuring a magnetic grille, locate the grille over the speaker bezel where it will be pulled into place. Note that square grilles may be positioned at any angle required. For CW models push fit the grille into place by applying gentle pressure around the grille into place until the grille edge is flush with the outer bezel.

Grille backing cloth

Some models feature a white backing cloth behind the grille to help minimize visual contrast with the ceiling. For the very best sound performance it is recommended that this cloth is removed before use. To remove simply peel away the backing cloth from the grille.

RP311v2

- Release Date **January 2022**
- Article No. **301022**
- EAN No. **4260393850989**
- Customs Tariff No. **85 198 100**
- Product URL **<https://www.trivum.de/RP311v2>**



RP311v2 - EN



Amplifier

- 2x30 watts sinus at 8 ohms
- Class D amplifier (digital)
- Impedance of the connected loudspeakers at least 4 ohms

Sources

- 1 x Streaming
- 1 x Analog input
- 1 x DAB+/FM tuner

Power supply

- 24V DC ~ 3A

Housing

- Power consumption at idle (without active zone): 5 watts
- DIN RAIL mounted device with 6 HP
- Dimensions: 107 mm x 92 mm x 63 mm (WxHxD)
- With packaging: 100 mm x 95 mm x 70 mm (WxHxD)
- Weight (net): 0,17 kg

Connections

- 1x Network (RJ45 socket)
- 1x USB (for service)
- 1x Speaker stereo (1x 4-pin screw terminal)
- 1x Line input stereo (1x 3.5mm jack)
- 1x DAB+/FM antenna (1x 2-pin screw terminal)
- 1x Power supply 24V +/- (1x 2-pin screw terminal)

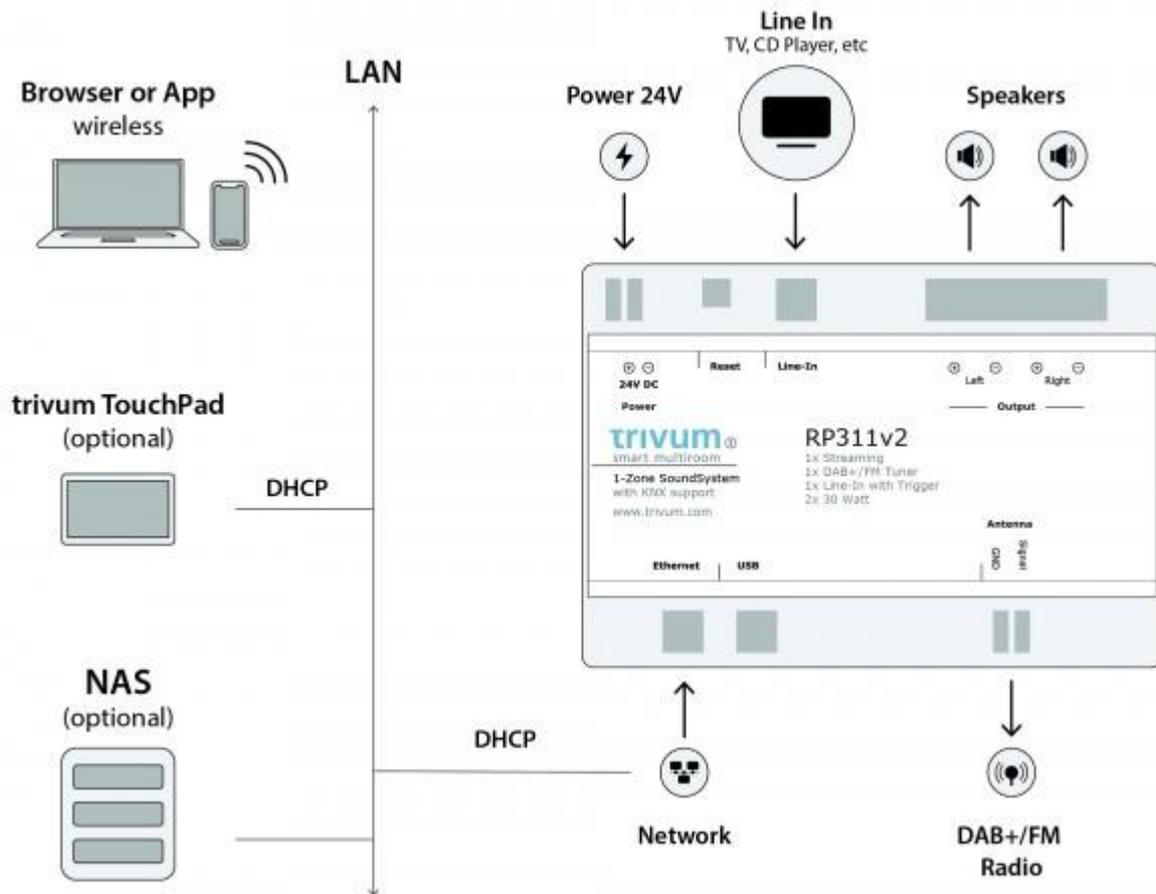
Front

Network

Scope of delivery

- Status LED
- LAN (RJ45 Ethernet)
- 1x RP311v2
- 1x Quick Installation Guide

The specifications mentioned here are subject to change without notice.



RP321

- Release Date **January 2022**
- Article No. **301023**
- EAN No. **4260393850750**
- Customs Tariff No. **85 198 100**
- Product URL **<https://www.trivum.de/RP321>**



RP321 - EN



Amplifier

- 4x30 watts sinus at 8 ohms
- Class D amplifier (digital)
- Impedance of the connected loudspeakers at least 4 ohms

Sources

- 2 x streaming
- 2 x analog input
- 1 x DAB+/FM tuner (the 2 zones share this tuner)

Power supply

- 24V DC ~ 5A
- Power consumption at idle (without active zone): 5 watts

Housing

- DIN RAIL mounted device with 8 HP
- Dimensions: 143 mm x 92 mm x 63 mm (WxHxD)
- With packaging: 149 mm x 95 mm x 70 mm (WxHxD)
- Weight (net): 0,21 kg

Connections

- 1x Network (RJ45 socket)
- 1x USB (for service)
- 2x Speaker stereo (1x 4-pin screw terminal)
- 2x Line input stereo (1x 3.5mm jack)
- 1x DAB+/FM antenna (1x 2-pin screw terminal)
- 1x Power supply 24V +/- (1x 2-pin screw terminal)

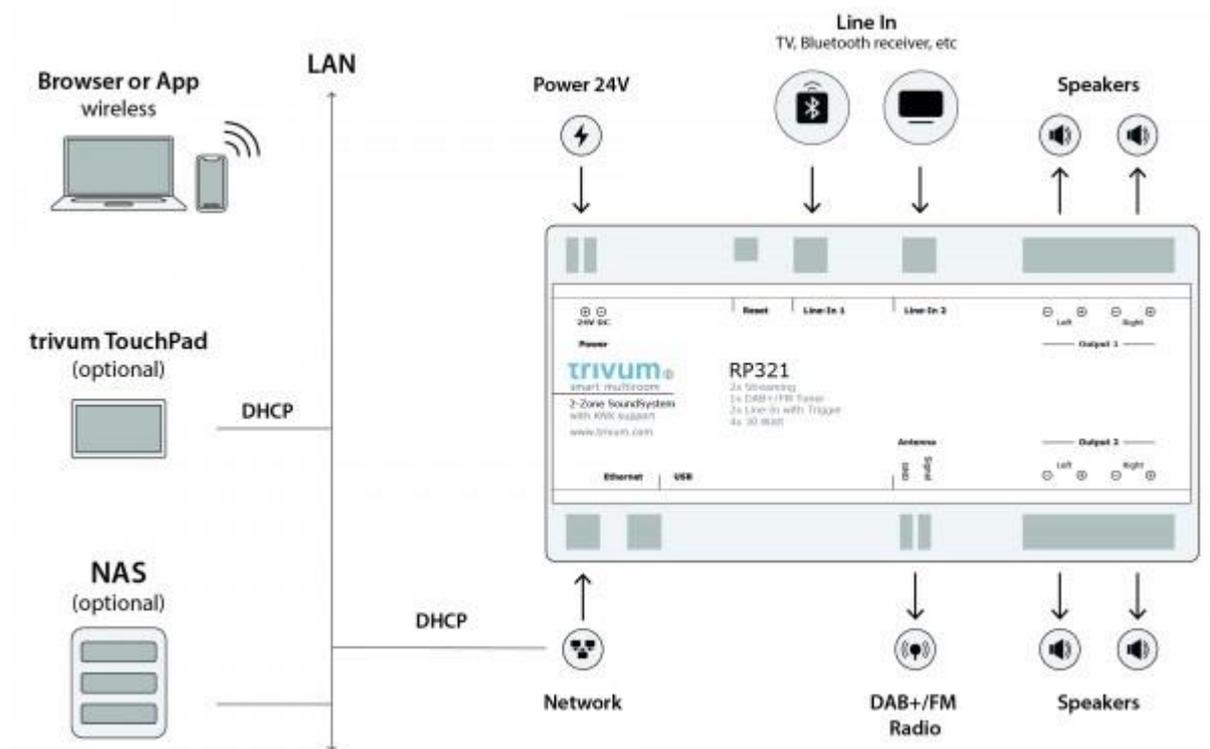
Front

Network

Scope of delivery

- Status LED
- LAN (RJ45 Ethernet)
- 1x RP321
- 1x Quick Installation Guide

The specifications mentioned here are subject to change without notice.





801.819 **RL CONNEX**

RX12W 100V Speaker cable Round 2 x 1.5mm² white 100M

Heavy duty 2 core speaker cable suitable for 100V line PA speaker installations. Stranded copper conductors with red and blue inner insulation.

Product colour : White

CSA : 1.5mm²

Conductor : 45x0.2mm

Sheath : White

Outer diameter : 6.8 x 6.5mm

Weight (kg) : 5,75

Touchpad 7 black

- Release Date **April 2016**
- Article No. **600014**
- EAN No. **4260393850354**
- Customs Tariff No. **84 716 070**
- Product URL **<https://www.trivum.de/Touchpad7>**



TouchPad 7 - EN



Screen

- Display Type: TFT LCD
- Screen diagonal : 7"
- Colors: 16.7 million
- Backlight: white LEDs
- Touch technology: capacitive touch panel
- Resolution : 1024 x 600
- Aspect ratio : 16:9
- Brightness : 450 cd/m2
- Contrast : 600 - 800:1
- Operating temperature: -20 ... +50°C

Housing

- Material: brushed aluminum
- Colour: aluminum black anodized
- Panel Dimensions : 176 mm x 110 mm x 11 mm
- Devices total height : 36 mm
- Package size: 195 mm x 59 mm x 155 mm (WxHxD)
- Total weight (net) : 447g

Power supply

- PoE (Power over Ethernet) : IEEE 802.3af; Class : 2
- Wiring : T568B
- max. power consumption : 5 W

Installation

- Power consumption in idle mode: approx. 4 W
- Wall installation with trivum Wall box, magnetic bracket (Not included in the scope of delivery)

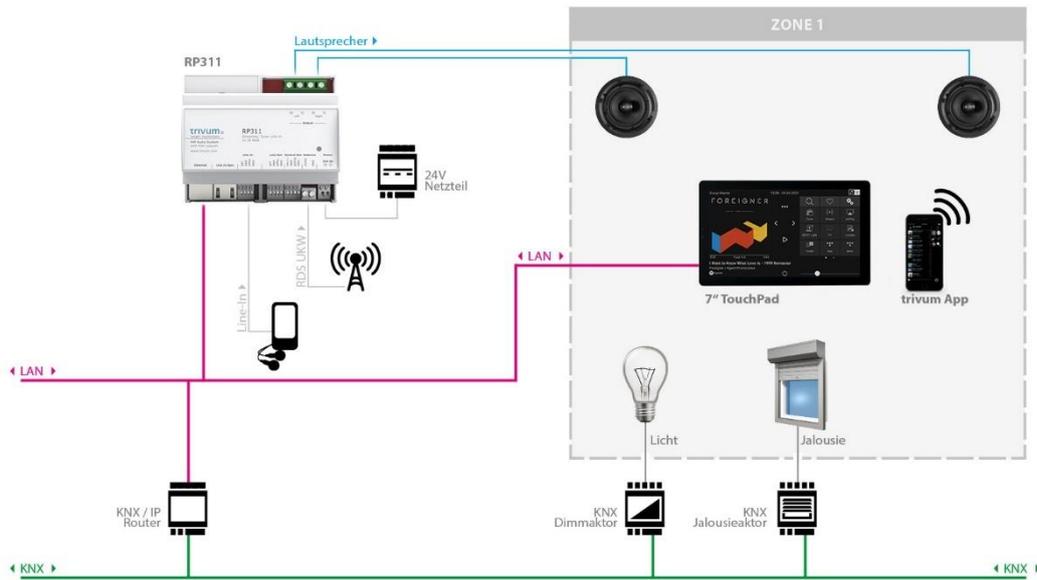
Connectors KNX

- 10-pin terminal block
- Functions: control of lighting, blinds, climate, scenes, IP camera, weather
- Connection : via KNX/IP router

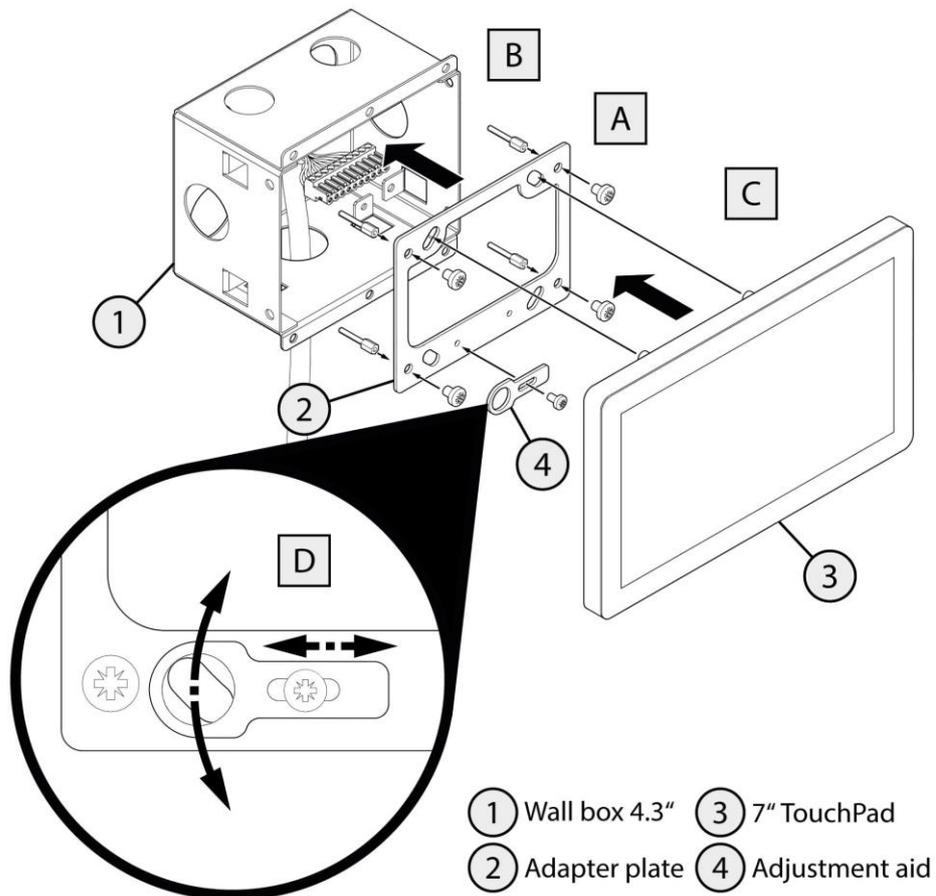
Scope of delivery

- 1x 10-pin connector for network and power supply
- 1x Mounting frame
- 1x Adjustment aid
- 1x Quick Installation Guide

The specifications mentioned here are subject to change without notice.



Installation (Wall box 4.3" - not included in the scope of delivery)



Touchpad 7 black

- Release Date **April 2016**
- Article No. **600014**
- EAN No. **4260393850354**
- Customs Tariff No. **84 716 070**
- Product URL **<https://www.trivum.de/Touchpad7>**



TouchPad 7 - EN



Screen

- Display Type: TFT LCD
- Screen diagonal : 7"
- Colors: 16.7 million
- Backlight: white LEDs
- Touch technology: capacitive touch panel
- Resolution : 1024 x 600
- Aspect ratio : 16:9
- Brightness : 450 cd/m2
- Contrast : 600 - 800:1
- Operating temperature: -20 ... +50°C

Housing

- Material: brushed aluminum
- Colour: aluminum black anodized
- Panel Dimensions : 176 mm x 110 mm x 11 mm
- Devices total height : 36 mm
- Package size: 195 mm x 59 mm x 155 mm (WxHxD)
- Total weight (net) : 447g

Power supply

- PoE (Power over Ethernet) : IEEE 802.3af; Class : 2
- Wiring : T568B
- max. power consumption : 5 W

Installation

- Power consumption in idle mode: approx. 4 W
- Wall installation with trivum Wall box, magnetic bracket (Not included in the scope of delivery)

Connectors

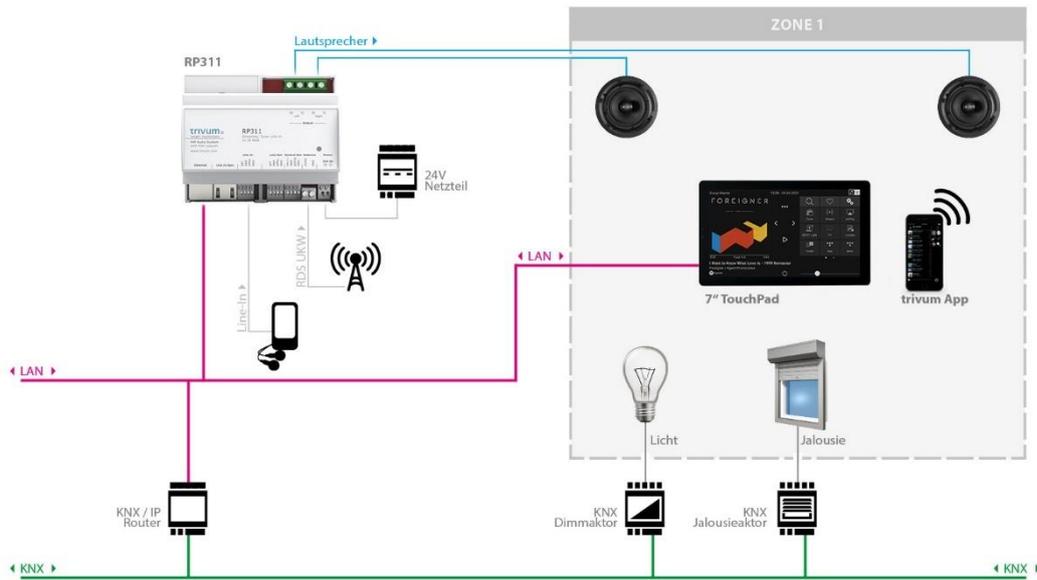
KNX

- 10-pin terminal block
- Functions: control of lighting, blinds, climate, scenes, IP camera, weather
- Connection : via KNX/IP router

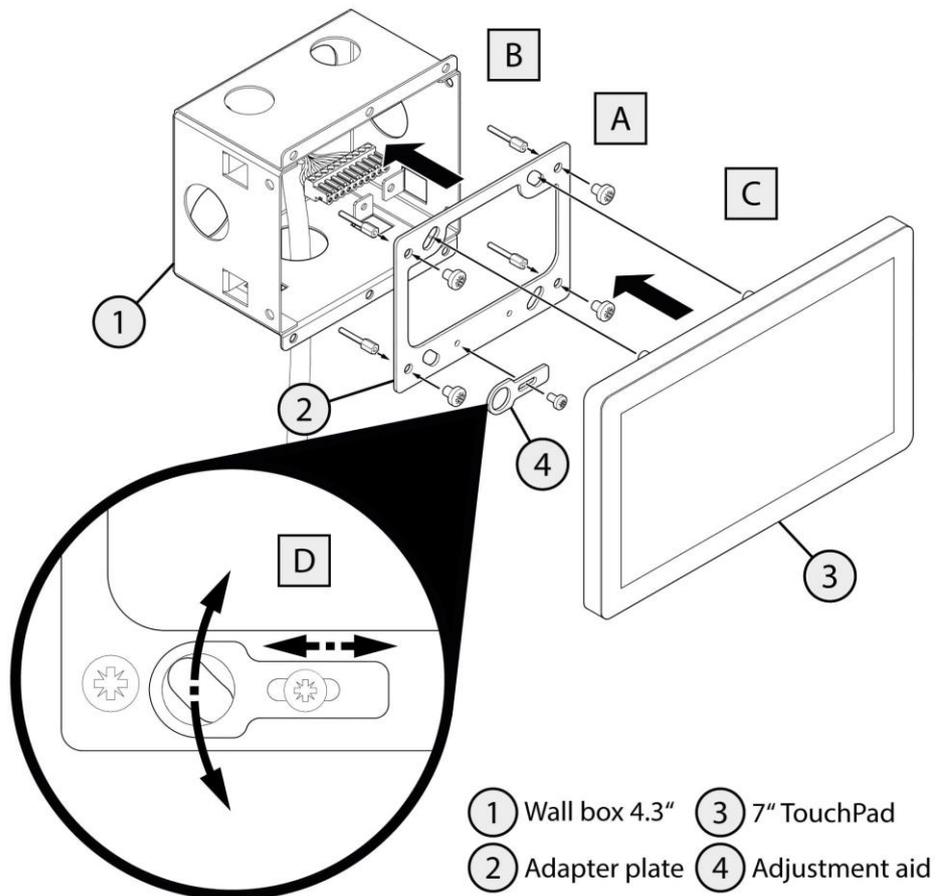
Scope of delivery

- 1x 10-pin connector for network and power supply
- 1x Mounting frame
- 1x Adjustment aid
- 1x Quick Installation Guide

The specifications mentioned here are subject to change without notice.



Installation (Wall box 4.3" - not included in the scope of delivery)





■ Features

- Ultra slim design with 70mm(4SU) width
- Universal input 85~264VAC(277VAC operational)
- No load power consumption<0.3W
- Isolation class II
- Pass LPS (Limited power source) for Blank type
- DC output voltage adjustable
- Protections : Short circuit / Overload / Over voltage
- Cooling by free air convection (working temperature:-30~+70°C)
- DIN rail TS-35/7.5 or 15 mountable
- Over voltage category III
- LED indicator for power on
- 3 years warranty

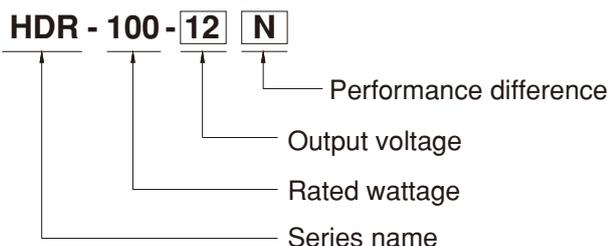
■ Applications

- Household control system
- Building automation
- Industrial control system
- Factory automation
- Electro-mechanical apparatus

■ Description

HDR-100 is one economical ultra slim 100W DIN rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 70mm(4SU) in width, which allows space saving inside the cabinets. The entire series adopts the full range AC input from 85VAC to 264VAC(277VAC operational) and conforms to BS EN/EN61000-3-2, the norm the European Union regulates for harmonic current. HDR-100 is designed with plastic housing that it can effectively prevent user from electric hazards. With working efficiency up to 90%, the entire series can operate at the ambient temperature between -30°C and 70°C under air convection. The complete protection functions and relevant certificates for home automations and industrial control apparatus (IEC62368-1, UL508, UL62368-1, BS EN/EN61558-2-16) make HDR-100 a very competitive power supply solution for household and industrial applications.

■ Model Encoding



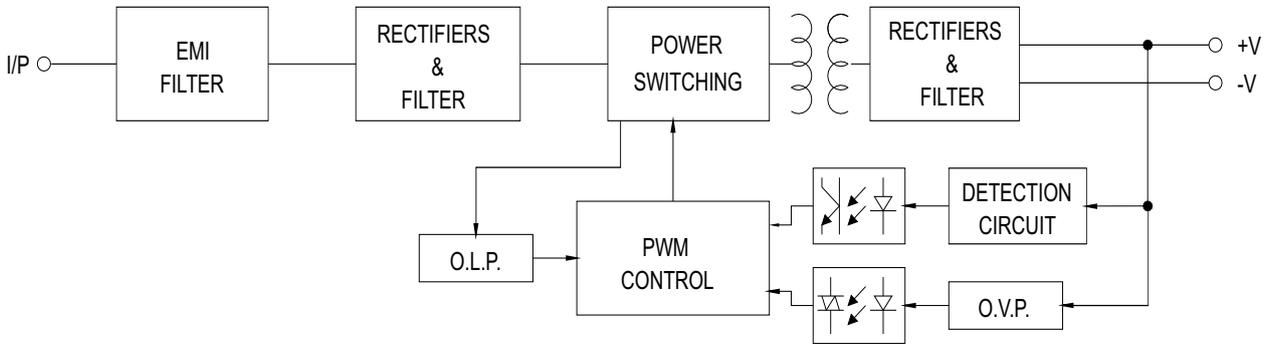
Type	Description	Note
Blank	92W max, Pass LPS with a narrower output adjustable range	In stock
N	100W max, Non-LPS with a wider output adjustable range	In stock



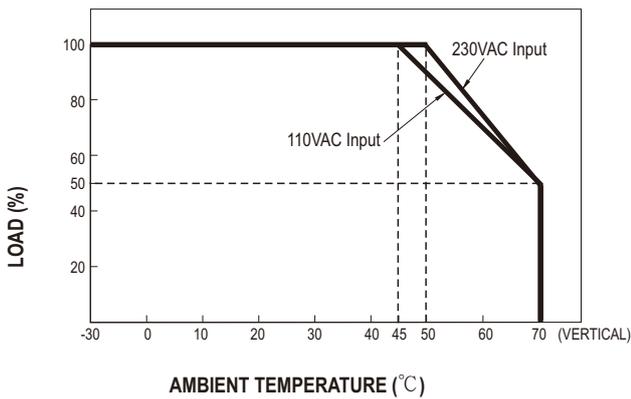
SPECIFICATION

MODEL		HDR-100-12	HDR-100-12N	HDR-100-15	HDR-100-15N	HDR-100-24	HDR-100-24N	HDR-100-48	HDR-100-48N	
OUTPUT	DC VOLTAGE	12V		15V		24V		48V		
	RATED CURRENT	7.1A	7.5A	6.13A	6.5A	3.83A	4.2A	1.92A	2.1A	
	CURRENT RANGE	0 ~ 7.1A	0 ~ 7.5A	0 ~ 6.13A	0 ~ 6.5A	0 ~ 3.83A	0 ~ 4.2A	0 ~ 1.92A	0 ~ 2.1A	
	RATED POWER	85.2W	90W	92W	97.5W	92W	100.8W	92.2W	100.8W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p		120mVp-p		150mVp-p		240mVp-p		
	VOLTAGE ADJ. RANGE	Pass LPS	12 ~ 13V		15 ~ 17V		24 ~ 25.5V		48 ~ 48.7V	
		Non LPS	12 ~ 13.8V		13.5 ~ 18V		21.6 ~ 29V		43.2 ~ 55.2V	
	VOLTAGE TOLERANCE Note.3	±2.0%		±1.0%		±1.0%		±1.0%		
	LINE REGULATION	±1.0%		±1.0%		±1.0%		±1.0%		
	LOAD REGULATION	±1.0%		±1.0%		±1.0%		±1.0%		
SETUP, RISE TIME	500ms, 60ms/230VAC		500ms, 60ms/115VAC at full load							
HOLD UP TIME (Typ.)	30ms/230VAC		12ms/115VAC at full load							
INPUT	VOLTAGE RANGE	85 ~ 264VAC (277VAC operational)			120 ~ 370VDC (390VDC operational)					
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	88%		89%		90%		90%		
	AC CURRENT (Typ.)	3A/115VAC		1.6A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 35A/115VAC		70A/230VAC						
PROTECTION	OVERLOAD	HDR-100 : 102 ~ 110% rated output power ; HDR-100-xxN : 105 ~ 150% rated output power Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~ 100% rated output voltage, recovers automatically after fault condition is removed								
	OVER VOLTAGE	14.2 ~ 16.2V		18.8 ~ 22.5V		30 ~ 36V		56.5 ~ 64.8V		
		Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C) RH non-condensing								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6								
	OPERATING ALTITUDE	2000 meters								
	OVER VOLTAGE CATEGORY	III ; According to EN61558, EN50178, EN60664-1, EN62477-1 ; altitude up to 2000 meters								
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL62368-1, UL508, TUV BS EN/EN61558-2-16, IEC62368-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to TUV BS EN/EN62368-1								
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC								
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Parameter	Standard				Test Level / Note			
		Conducted	BS EN/EN55032(CISPR32), CNS13438				Class B			
		Radiated	BS EN/EN55032(CISPR32), CNS13438				Class B			
		Harmonic Current (Note 5)	BS EN/EN61000-3-2				Class A			
		Voltage Flicker	BS EN/EN61000-3-3				-----			
	EMC IMMUNITY	BS EN/EN55024, BS EN/EN61000-6-2, BS EN/EN61204-3								
		Parameter	Standard				Test Level / Note			
ESD		BS EN/EN61000-4-2				Level 3, 8KV air; Level 2, 4KV contact, criteria A				
Radiated Susceptibility		BS EN/EN61000-4-3				Level 3, criteria A				
EFT/Burest		BS EN/EN61000-4-4				Level 3, criteria A				
Surge		BS EN/EN61000-4-5				Level 4, 2KV/L-N, criteria A				
Conducted		BS EN/EN61000-4-6				Level 3, criteria A				
Magnetic Field		BS EN/EN61000-4-8				Level 4, criteria A				
Voltage Dips and interruptions	BS EN/EN61000-4-11				>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods					
OTHERS	MTBF	856.5K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	70*90*54.5mm (W*H*D)								
	PACKING	0.27Kg; 48pcs/14Kg/1.06CUFT								
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Harmonic current test at 90% load for HDR-100-xxN.</p> <p>5. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>									

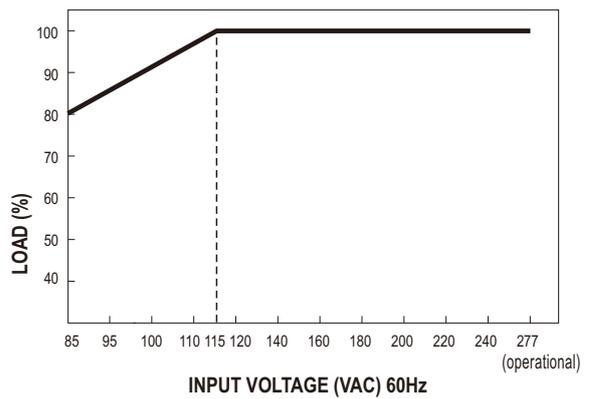
■ Block Diagram



■ Derating Curve VS Ambient Temperature

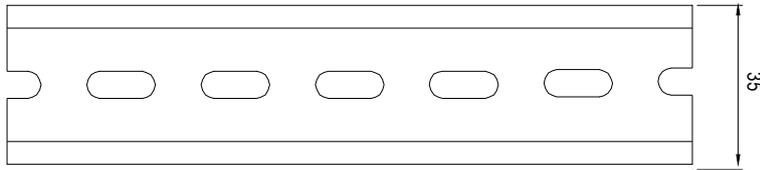
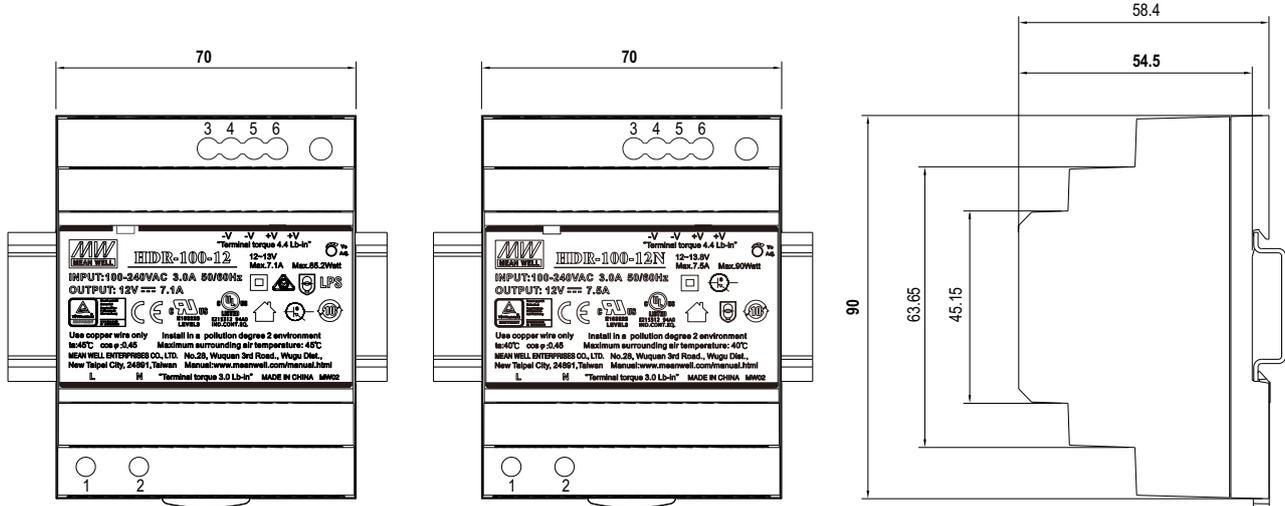


■ Output Derating VS Input Voltage



Mechanical Specification

(Unit: mm , tolerance $\pm 0.5\text{mm}$)



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	3,4	-V
2	AC/N	5,6	+V

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>