Honeywell

Voice Alarm

Class D Power Amplifiers

The class D power amplifiers are components of the Honeywell Voice Alarm System combining the latest in digital audio technology with the integrity necessary for emergency Voice Alarm systems to satisfy the requirements of EN54 part 16.

Class D Power Amplifiers

The D400 and D250 voice alarm power amplifiers comprise of two independent amplifier channels with 100 V output compatible with the Honeywell Voice Alarm System. The power amplifiers are controlled and monitored by the DOM4-8 (Digital Output Module) and DOM4-24 modules.

The 100v audio connections from the amplifiers are managed by the VA system Digital Output Module (DOM). Inputs are via a combined audio and control cable for each channel making connection simple and problem free. The amplified 100V output is routed back to the DOM where output to the loudspeaker lines is managed.

Key Features:

- Power amplifier, 2-channel, Class D, 100 V outputs
- Two models available: 2 x 250 W / 2 x 400 W
- 80% efficiency factor
- Integrated electronic protection against thermal overload and short-circuits during output
- Certified to EN 54-16
- Full power rating on 24 V standby power operation
- CPD number: 0786-CPD-20997

Connections

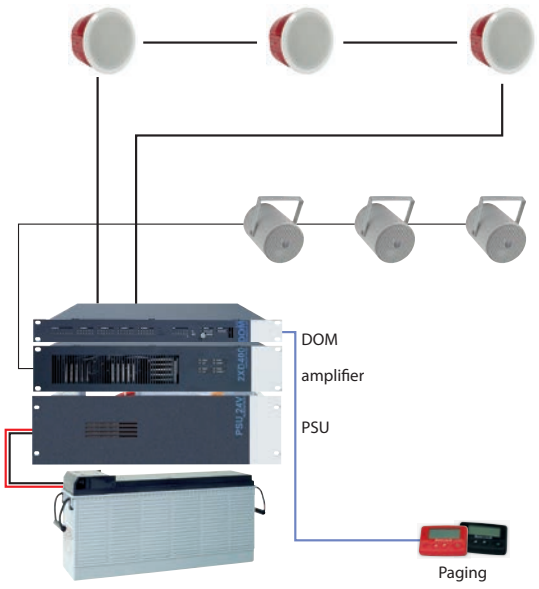
- Combined LF / control inputs
- Dual-channel 100 V output
- 230 V AC Power supply
- 24 V DC emergency power input

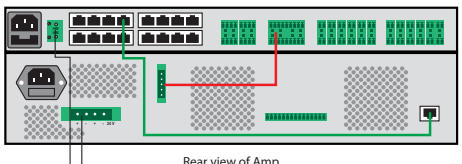
General Indicators

- 230 V AC mains voltage
- CPU status
- Common fault
- 24 V DC emergency power supply

Indicators per amplifier channel

- Operation
- Amplifier channel status
- Amplifier channel fault
- Clip display





24 V DC Input to PSU

DAL (Digital Audio Link)
Input signal amplifier
Output signal amplifier
100 V loudspeaker line

Voice Alarms

Class D Power Amplifiers

Technical Specifications

SPECIFICATION		
DIMENSIONS		
Height, Width, Depth:	88mm, 402 mm / 2 HU, 19”mm, 483mm	
Weight	D250 approx. 16.5 kg, D400 approx. 19 kg	
HOUSING COLOR:		
Body	Grey, similar to RAL 7016	
GENERAL TECHNICAL DATA		
Nominal voltage	230 V AC	
Nominal frequency	50 to 60 Hz, +10% / -5%	
Emergency power supply	24 V DC	
Functional principle	Class D	
Transmission frequency band (-1 dB)	50 Hz to 22 kHz	
Signal-to-noise ratio	> 90 dB, A - unweighted	
Harmonic distortion at full load / 1 kHz	< 0.03 %	
Channel separation	> 42 dB	
Input impedance 20 kΩ, el. balanced Specification	20 kΩ, el. balanced	
ELECTRICAL SPECIFICATION - D250		
Rated power output (sin.)	2 x 250 W	
Voltage consumption (230 V AC)	2.8 A	
VOLTAGE CONSUMPTION		
(24 V DC / Sinus continuous tone*)	25 A	
(24 V DC / Announcement / 1/3 load)	* 8.75 A	
(24 V DC / Announcement / 1/8 load)	* 3.6 A	
Power consumption in standby mode (230 V) separated f. mains supply	A`pprox. 0 VA	
ELECTRICAL SPECIFICATION - D400		
Rated power output (sin.)	2 X 400 W	
Voltage consumption (230 V AC)	4.5 A	
VOLTAGE CONSUMPTION		
(24 V DC / Sinus continuous tone*)	40.5 A	
(24 V DC / Announcement / 1/3 load)	*13.9 A	
(24 V DC / Announcement / 1/8 load)	*5.6 A	
Power consumption in standby mode (230 V) separated f. mains supply	Approx. 0 VA	
DISSIPATION LOSS	**D400**	**D250**
230 V AC (Idle)	30 W max	25 W max
24 V DC (channels off)	3 W max	3 W max
24 V DC (channels on)	12 W max	10 W max
ENVIRONMENTAL SPECIFICATIONS		
Ambient temperature during operation	-5°C to +55°C	
Humidity:	40% to 93% relative humidity (non-condensing)	

† The voltage consumption is for both amplifier channels together when both outputs are wired with maximum speaker power (2 x 250 W or 2 x 400 W)

DESCRIPTION	ORDER CODES
Class D Power Amplifier - 2 x 250W / 100V 580231	580231
Class D Power Amplifier - 2 x 400W / 100V 580232	580232

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