



## NOCTUA NF-A14 industrialPPC-24V-2000 Q100 IP67 PWM

140x140x25mm Fan

industrialPPC

Conceived for industrial heavy-duty applications that require enhanced cooling performance and advanced ingress protection, the NF-A14 industrialPPC (Protected Performance Cooling) is a ruggedised high-speed version of the award-winning retail model. The 24V Q100 variant uses Noctua's AEC-Q100 qualified wide input range NE-FD4 motor driver IC in order to support 24V-based industrial and automotive applications. Its sophisticated inrush current suppression and extreme electrical robustness with extended burst and surge immunity allow it to operate safely in sensitive or hostile electronic environments. Thanks to the outstanding aerodynamic efficiency of the NF-A14 design and the use of a novel three-phase motor, the industrialPPC version provides superior airflow and pressure capacity while keeping noise and power consumption at a moderate level as against comparable high-speed fans. While its fibre-glass reinforced polyamide construction and certified water and dust protection make the NF-A14 industrialPPC suitable for operation in challenging surroundings, the renowned SSO2 bearing technology guarantees an MTBF of over 150,000hrs. Topped off with Noctua's trusted reliability and 6-year manufacturer's warranty, the NF-A14 industrialPPC is an ideal choice for highly demanding applications that require superior flow rates and ultimate dependability.

### NE-FD4 PWM IC with SCD

Supporting fully automatic PWM speed control, the fan uses Noctua's custom-designed NE-FD4 PWM IC for 24V three-phase motors. The NE-FD4 is AEC-Q100 qualified and integrates Noctua's proprietary Smooth Commutation Drive (SCD) technology, which suppresses PWM switching noise and thus makes the fan quieter at lower speeds.

### AEC-Q100 qualification

The 24V Q100 version's NE-FD4 motor driver IC complies with the Automotive Electronics Council's highly rigorous AEC-Q100 failure-mechanism-based stress test qualification for integrated circuits, which makes the fan ideal for use in automotive applications.

### High electrical robustness

Meeting the AEC-Q100 standard's stringent requirements for burst and surge protection, the 24V Q100 version's high electrical robustness permits the fan to be used not only in automotive projects but also in other harsh environments with transients from electric motors and other inductive switching loads.

### Inrush current suppression

The fan's voltage-stabilised inrush current suppression provides a smooth power-up and dramatically reduces power line transients that otherwise could affect other electronic components connected to the power line. This makes the fan safe to use in sensitive electronic environments.

Size	140 x 140 x 25 mm
Bearing	SSO2
Blade geometry	A-Series with Flow Acceleration Channels
Frame technology	AAO (Advanced Acoustic Optimisation)
IP rating / connector	67 / 4-pin PWM
Input power / Operating voltage	2.4 W / 24 V
MTTF	> 150.000 h

Max. rotational speed 12V (+/-10%)	1100 RPM
Max. rotational speed 24V (+/-10%)	2000 RPM
Max. airflow	182.5 m <sup>3</sup> /h
Max. acoustical noise	31.5 dB(A)
Max. static pressure	4.18 mmH <sub>2</sub> O

Product name	Noctua NF-A14 industrialPCC-24V-2000 Q100 IP67 PWM
EAN-No.	9010018100204
UPC-No.	841501110207
Packaging dimensions (HxWxD)	200 x 190 x 34 mm
Weight incl. packaging	315 gr
Warranty	6 Years
MSPR	29.90 EUR
Packaging unit	20 Pcs.
Packaging dimensions / unit (HxWxD)	410 x 400 x 200 mm
Weight incl. packaging / unit	7.3 kg
Scope of delivery	Fan, 4 Fan screws

