

# Creating Smart Drive Solutions

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**The i550 motec frequency inverter for motor and wall mounting in protection class NEMA 4X is the optimal decentralized drive solution. The inverter can be extended with an extension box (disconnect switch, operating elements) for universal use.**

Fast mounting and easy commissioning thanks to user-friendly tools as well as connections for commercially available connectors are the focus of this inverter.

Parameters, drive behavior and usability correspond to our proven frequency inverters. Rounded off by high energy efficiency, we thus offer a modern and sustainable drive solution.

The requirements of the Ecodesign Directive, Standard EN 50598-2, are met.


Application areas: Conveyor drives, traveling drives, winding drives, hoist drives, extruders, packaging machines, pumps, fans, ...

## Highlights

- Compact solution for decentralized drive technology, wall-mounted or motor-mounted with high NEMA 4X (IP66) protection
- Wall-mounted expandable: Extension Box with disconnect switches and operating elements
- Fast mounting due to pluggable, standardized connections (plug & play)
- IO-Link master functionality for easy data exchange between IO-Link sensors and actuators
- Regenerative feedback mode integrated for very high energy efficiency - no brake resistor required

# Product information

i550 motec frequency inverter

<b>i550 motec</b>	
	
<b>Design/Mounting</b>	Wall or motor
<b>Degree of protection</b>	NEMA 4X (IP66)
<b>Mains connection/Power range</b>	
1 AC 230 V	-
3 AC 230 V	0.5 ... 20 hp / 0.37 ... 22 kW
3 AC 400 V	0.5 ... 60 hp / 0.37 ... 45 kW
<b>Market approvals</b>	
Approval	CE, UKCA, UL, CSA
Environment	RoHS
Energy efficiency	IE2 according to EN IEC 61800-9-2
<b>Functions</b>	
<b>Motor control</b>	Energy-saving function (VFC eco), V/f characteristic control linear/square-law (VFC plus), sensorless vector control (SLVC), sensorless control for synchronous motors Motor HTL encoder 200 kHz or IO-Link interface
<b>Properties</b>	DC-injection braking, brake management for low-wear brake control, S-ramps for smooth acceleration and deceleration, flying restart circuit, PID control, cascade function for pumps and fans Dynamic braking through regeneration
<b>Functional safety</b>	Safe torque off (STO) Extended Safety (planned)
<b>Overload behavior</b>	200 % for 3 s; 150 % for 60 s
<b>Cooling</b>	
Ambient operating temperature	3K3 (14 ... +60 °F) EN IEC 60721-3-3 (derating of 2.5 %/°C above +104 °F)
<b>Inputs/Outputs</b>	
Digital input/output	Max. 8/0 or 4/4 (configurable)
Analog input/output	-
NO/NC relay	-
<b>IO-Link</b>	
Operation	Master
Ports	Max. 4
<b>Communication</b>	
	EtherCAT EtherNet/IP Modbus TCP PROFINET
<b>Diagnostics</b>	
	USB RFID, WLAN (planned)
<b>Operating conditions</b>	
EN 61000-3-2	No additional measures
EN 61000-3-12	
EMC category C1	-
EMC category C2	Max. 400 in
<b>RCD operation</b>	
	Up to 60 hp: 30 mA