

## Single phase to Three phase converter

### Description:

Our SDT series Power Phase converter is one of the most advanced AC to AC conversion products in the world which can convert ordinary single-phase power to industrial three-phase power.

It can solve production inconvenience because of some areas with the three-phase electric power restrictions, also solved some user requirements that can't apply for the three-phase electric because of space limitation.

It has the main advantages of high quality sine wave AC output, microcomputer control, humanness design, high efficiency, low no-load loss and no pollution.

The converter can supply AC power to all kinds of electric equipment, electric motors, pump, compressor, and other industrial power supply. Applicable to all types of load.



### Technical Feature:

- 1) The input voltage, output voltage, frequency and phase **can be custom made**.
- 2) Two kinds of start mode: Step Down Voltage Start and **Variable Frequency Start**. VFD is especially used for taking 3 phase inductive load more easily. This function is very convenient for users and also reduce frequency converter's usage, which reduced the cost of equipment investment, easy to connect wires and control.
- 3) Output AC Power is suitable for all types of home appliances, electric tools, electric motors etc.
- 4) Using the fifth generation efficient **IPM intelligent module from Japanese Mitsubishi**, high efficiency and stable performance. It with **powerful protection function** for short circuit, over load, over temperature. Service life can reach **15-20 years**.
- 5) **Pure sine wave output**. with good transient response, little harmonic distortion, higher conversion efficiency and stable output voltage features.
- 6) Adopted **low frequency isolated transformer**, safe and reliable, single phase input power is completely isolated from three phase output power, high conversion efficiency, high instantaneous power, **stable performance and low load loss**.
- 7) Adopts new magnetism material, largely reduce machine consumption, making **efficiency** maximum up to **98%**.
- 8) Adopts America DSP chip, safe and reliable.
- 9) Adopts black pure aluminum radiator, which confirms the best radiating performance
- 10) Converter has the function of filtering the grid disturbance and interference at the same time, which is a good performance of stabilized voltage and frequency power, to provide a more stable and pure power supply environment for the back end devices
- 11) Intelligent fan speed control system, low no-load loss
- 12) **LCD display**, high efficiency, easy installation
- 13) The **output frequency 50Hz/60Hz can be set**



Remarks: AC Input: L and Neutral wire

AC Output: L1, L2, L3, Neutral wire and Ground Wire

## Technical data

Model		SDT-3KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input rated voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	13.6A
AC Output	Rated AC output power	3KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	4.5A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-5KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	22.7A
AC Output	Rated AC output power	5KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	7.58A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-6KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	27.2A
AC Output	Rated AC output power	6KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	9.1A (per phase)
	Power Factor (PF)	0.9
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-7KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	31.8A
AC Output	Rated AC output power	7KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	10.6A (per phase)
	Power Factor (PF)	0.9
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-8KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	36.3A
AC Output	Rated AC output power	8KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	12.1A (per phase)
	Power Factor (PF)	0.9
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	630x630x900mm
	Weight (Kg)	100Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	

Model		SDT-10KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	45.4A
AC Output	Rated AC output power	10KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	15.1A (per phase)
	Power Factor (PF)	0.9
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	540x540x760mm
	Weight (Kg)	106Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-12KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	54.5A
AC Output	Rated AC output power	12KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	18.18A (per phase)
	Power Factor (PF)	0.9
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	540x540x760mm
	Weight (Kg)	120Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	

Model		SDT-15KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	68.2A
AC Output	Rated AC output power	15KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	220/240/380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	22.76A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	600x700x1200mm
	Weight (Kg)	162Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-20KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	90.9A
AC Output	Rated AC output power	20KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	220/240/380/400/415/440/480Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	30.35A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	600x700x1200mm
	Weight (Kg)	185Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-25KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	113.6A
AC Output	Rated AC output power	25KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	220/240/380/400/415/440Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	37.94A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	600x700x1200mm
	Weight (Kg)	200Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-30KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	113.6A
AC Output	Rated AC output power	30KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	220/240/380/400/415/440Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	37.94A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	600x700x1200mm
	Weight (Kg)	200Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	



Model		SDT-40KW
Isolation		Low Frequency Transformer
AC Input	Input rated voltage (VAC)	Single phase 220V
	Input voltage range	110/120/220/230/240Vac optional
	Input rated current (A)	181.8A
AC Output	Rated AC output power	40KW
	AC output waveform	Pure sine wave
	Phases	Three phase, 4 wires
	Output rated voltage	380VAC ±3%
	Output voltage range	220/240/380/400/415/440Vac optional
	Output Frequency	50Hz/60Hz±0.05Hz
	Output rated current (A)	60.6A (per phase)
	Power Factor (PF)	0.95
	Overload Ability	150%, 10s
	Efficiency	>94%
	Waveform distortion rate (THD)	<3% (Linear load)
	Crest Factor (CF)	3:1
	Display	LCD
	Electrical insulation properties	2500Vac, 1 Minute
	Ambient temperature	-15~+55°C
	Using environment humidity	0~90%, No condensation
	Protection	Input under voltage, overvoltage, output over-current, short circuit, overheating etc.
Structure	Cooling method	Fan-cooled
	Noise	<40dB
	Degree of protection	IP20 (indoor)
	Using altitude (m)	≤3000
	Dimensions (mm)	600x700x1200mm
	Weight (Kg)	230Kg
CE Standard	EN60950-1:2006+A11:2009, EN61000-6-4:2007+A1:2001, EN61000-6-2:2005, EN61000-3-12:2005, EN61000-3-11:2000	

## SANDI ELECTRIC CO.,LTD

Add: Lvao Industrial Zone Liushi Town, Yueqing City,

Zhejiang Province 325604, China.

Tel: +86-577-62776918

Mobile: +86-13175696608

Fax: +86-577-61209955

E-mail: [carrie@sandi.cc](mailto:carrie@sandi.cc)

Skype: carrie.rong

QQ: 1842566745

Whatsapp: 13175696608

MSN: [carrie-rong@hotmail.com](mailto:carrie-rong@hotmail.com)

Web: <http://www.lgis.cc>