Technical Data sheet

Industrial Inverter / Transformer Based Design

MODEL **: TECNED OM(B-19)**

Nominal DC input voltage : 24V / 48V / 110 (125V) / 220V
Capacity : 1kVA / 1,5kVA / 2kVA / 3kVA / 4kVA / 5kVA / 6kVA / 7,5kVA

Fault Tolerant Topology

Available with built-in static bypass and Active Transition Mode *

(* synchronized switch between 2 modules / no bypass required)

Transformer Based Topology

Rectifier rate & Configuration

Nominal input voltage	24 - 48 - 110 (125) - 220Vdc						
Output rating (kVA/kW)	1/0.8	2/1.4	3/2.4	4/3.2	4-May	6/4.8	7.5/6

Input

Input voltage range	-15% to + 35%
Input protection	Fusing
Bypass input	110/120/200/220/230/240/277V, (2W+E)
Bypass voltage tolerance	+/- 10% seleclable
Bypass frequency tolerance	+/- 10% selectable

Bypass system

single leg static switch	build-in with automatic output sensing
transfer alternative module	active transition (dip-switch setting on-board *)
double leg static switch	build-in with separate bypass input
preferred source select	active synchronized transition (dip-switch setting on-board *)

* Requires RJ45 plug connection between modules

Output

nominal output voltage	[V]	1Phase 110/120/200/220/230/240/277V, (2W+E)
output frequency	[F]	50 / 60 Hz
output frequency tolerance	[%]	+/- 0.1% free running
output waveform		SineWave
output voltage TH-V	[%]	Max 1,5%@ 100% liniar load
output voltage TH-V	[%]	Max 3% @ non-linear load
output voltage stability	[%]	Static +/- 1%
output voltage stability	[%]	Dynamic +/- 3%, 100% load step
recovery time	[ms]	< 20 msec
overall efficiency	[%]	Up to 95% (depending on DC bus voltage)
crest Factor		> 3:1
galvanic isolation		Yes (Inverter Output Transformer)

Protection

AC Short circuit & overload	Fusing
DC Surge protection	(option)
Automatic output source selection	Active transition (option)
DC Voltage protection	Over, Under voltage
Inverter output short circuit	Output current limit
Temperature	Transformer & heatsink high temperature alarm

Transformer Based Topology

LED lamp status

LED	Inverter operation	Control	Push button-on
max. 8 x LED			Push button-off
	General alarm		Push button silent buzzer
	Load on inverter		Push button LED test
	DC High	LED	Bypass active (option)
	DC Low		Active / Stand-by (option)
	Fan Failure		

LCD

Measurements	Settings / Activation	Alarm Messages
Input voltage	Inverter prefered	DC. High
Input current	bypass prefered	DC.Low
Output & Bypass voltage	Load to inverter	Inverter Fail
Output & Bypass current	Load to bypass	Fan Failure
Output & Bypass Frequency	Master / Slave	Load on bypass
		Temperature & failure notice

Potential free contact (Max. 250Vac or 30Vdc / 2A)

4 PFC (standard)
(programmable)

General Alarm (ECU fail)	High battery voltage	Fan failure alarm
Bypass input failure	Battery fuse trip	Load on Bypass
Low battery voltage	DC ground fault	

General data

Equipment layout designed with fault tolerant power and control circuits
Storage temperature -25 to + 70 °C
Operating temperature -10° to + 40° Celsius
Humidity Max 95%
Installation altitude up to 1000 meter at full rate
Derating 7% per 1000 meter to 4000m
Audible Noise 55dBA - 65dBA
Cooling: forced air (fan cooling)
Enclosure: Floor standing cabinet IP20 / Aluzinc frame / powder coat RAL 7035
Dimension

1 - 5 kVA	5U high
6 kVA	6U high
7,5 kVA	7U high

Shipping weight (kg)	30	42	55	60	75	95

Transformer Based Topology

Standard

ISO9001	Quality management systems
IEC- 60146	commutated converters
EMC 55011	Industrial, scientific, and medical (ISM) radio-frequency equipment—Radio disturbance characteristics—Limits and methods of measurement; Amendment A1:1999 to EN 55011:1998.
IEC- 62040-1	Uninterruptible power systems (UPS) Part 1: General and safety requirements for UPS
IEC 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per
IEC 61000-3-12	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with
IEC/61000-6-5	Low voltage AC Surge 1.2/50 µs, 2 kV line to ground,1 kV line to line (equipment installed in power stations and MV substations. Low voltage DC Surge 1.2/50 µs, 2 kV line to ground, 1 kV line to line

Contact Details

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