



Tayseer Power Co.

Trade, Maintenance & Rental Of Elect. Generators



PERKINS GENERATOR

750 KVA (600 KW) (UK)



4000 Series 4006-23TAG2A Diesel Engine – ElectropaK

702 kWm @ 1800 rpm

The Perkins® 4000 Series is a family of 6, 8, 12 and 16 cylinder diesel engines, designed to address today's uncompromising demands within the power generation industry with particular aim at the standby market sector. Developed from a proven engine range that offers superior performance and reliability.

The 4006-23TAG2A is a turbocharged and air-to-air charge cooled, 6 cylinder diesel engine offered with either temperate or tropical cooling. Its premium features and design provide economic and durable operation as well as an exceptional power to weight ratio, excellent load acceptance and improved gaseous emissions, plus the overall performance and reliability characteristics essential to the power generation market.



Specification		
Number of cylinders	6 vertical in-line	
Bore and stroke	160 x 190 mm	6.3 x 7.5 in
Displacement	22.921 litres	1397 in ³
Aspiration	Turbocharged and air-to-air charge cooled	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	13.6:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	113.4 litres	29.5 US gal
Cooling system	Water-cooled	
Total coolant capacity	105 litres	27.7 US gal

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Photographs are for illustrative purposes only and may not reflect final specification.
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Final weight and dimensions will depend on completed specification.

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 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

4000 Series 4006-23TAG2A Diesel Engine – ElectropaK

702 kWm @ 1800 rpm

Features and benefits

Economic power

- Individual 4 valve cylinder heads giving optimised gas flows
- Unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion
- Commonality of components with other engines in the 4000 Series family for reduced stocking levels

Reliable power

- Developed and tested using the latest engineering techniques
- Piston temperatures controlled by an advanced gallery jet cooling system
- Tolerant of a wide range of temperature without derate

Compact, clean and efficient power

- Exceptional power to weight ratio and compact size give optimum power density for easier transportation and installation
- Designed to provide excellent service access for ease of maintenance
- Engines to comply with major international standards
- Low gaseous emissions that will satisfy the requirements of ½ TA Luft (1986)

Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory – strengthening relationships and providing more value to you, our customer
- Through an experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their disposal covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 100% reassurance that you receive the very best in terms of quality for lowest possible cost .. wherever your Perkins powered machine is operating in the world

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Technical information

Air inlet

- Mounted air filter

Fuel system

- Direct fuel injection system, fuel lift pump
- Fuel cooler

Governing

- Heinzmann digital governor – governing to ISO 8528-5 Class G2

Lubrication system

- Wet sump with filler and dipstick
- Lubrication oil filters
- Oil cooler with separate filter header

Cooling system

- Twin thermostats, water pump
- System designed for ambients up to 35°C or 50°C
- Radiator supplied loose incorporating air-to-air charge cooler

Electrical equipment

- 24 volt starter motor, 24 volt 70 amp battery charging alternator with integral voltage regulator and activating switch
- High coolant temperature switch
- Low oil pressure switch

Flywheel and housing

- SAE J620 size 18 flywheel
- SAE 'O' flywheel housing

Literature

- User's Handbook and Parts Manual

Optional equipment

- Heavy-duty air cleaners – paper element with pre-cleaner
- Changeover lubrication oil filter
- Changeover fuel filter
- Immersion heater with thermostat
- Additional manuals
- 4 metre wiring harness
- Tropical or temperate radiator kit
- Temperate fan

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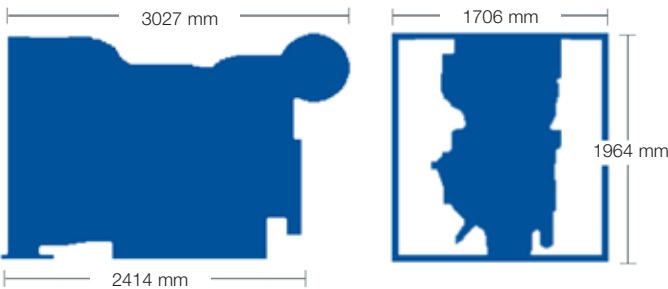
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THE HEART OF EVERY GREAT MACHINE

4000 Series 4006-23TAG2A Diesel Engine – Electropak

702 kWm @ 1800 rpm



Engine package weights and dimensions		
Length	3027 mm	119 in
Width	1706 mm	67 in
Height	1964 mm	77 in
Weight (dry)	2524 kg	5564 lb

4000 Series 4006-23TAG2A Diesel Engine – ElectropaK

702 kWm @ 1800 rpm

Speed rpm	Type of operation	Typical generator output (Net)		Engine power			
				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1800	Continuous baseload	600	480	554	743	511	685
	Prime power	750	600	684	917	638	855
	Standby (maximum)	825	660	759	1018	702	941

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on an average alternator efficiency and a power factor (cos. θ) of 0.8. Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2. Lubricating oil: 15W40 to API CG4.

Rating definitions

Baseload power: Power available for continuous full load operation. No overload is permitted on baseload power. **Prime power:** Power available at variable load with a load factor not exceeding 80% of the prime power rating. There is no overload permitted on baseload power. **Standby power:** Power available in the event of a main power network failure up to a maximum of 500 hours per year of which up to 300 hours may be run continuously. Load factor may be up to 100% of standby power. No overload is permitted.

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm l/hr
Standby power	226	199
Prime power	222	177
Baseload power	210	136
75%	212	129
50%	212	90

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THE HEART OF EVERY GREAT MACHINE



TAL 049

Low Voltage Alternator - 4 pole

730 to 1000 kVA - 50 Hz / 915 to 1250 kVA - 60 Hz
Electrical and mechanical data

LEROY-SOMER™

Nidec
All for dreams

Adapted to needs

The TAL alternator range is designed to meet the needs of general applications such as prime power and stand-by.

Compliant with international standards

The TAL range complies with international standards and regulations: IEC 60034 and derivative.

The range is designed, manufactured and marketed in an ISO 9001 and 14001 environment.

Electrical design

- Class H insulation
- Shunt excitation
- Low voltage winding:
 - Three-phase 50 Hz: 380V - 400V - 415V - 440V / 220V - 230V - 240V
 - 60 Hz: 380V - 416V - 440V - 480V / 220V - 208V - 240V
- 6-terminal plates in 6-wire version or suitable for 12-wire option
- Optimized performance

Robust design

- Compact and rugged assembly to withstand engine vibrations
- Steel frame
- Cast iron flanges and shields
- Single bearing design to be suitable with most diesel engines
- Sealed for life bearing
- Standard direction of rotation: clockwise when looking at the drive end view (for anti-clockwise, derate the machine by 5%)

Excitation and regulation system suited to the application

	Excitation system				Regulation options		
	AVR	Shunt	AREP	PMG	ULc/us	Remote voltage potentiometer	C.T. for paralleling
Three-phase 6-wire	R150	Standard				√	
	R180		Standard	Standard		√	√
	R450		Option	Option	√	√	√
Three-phase 12-wire	R250	Standard			√	√	
	R180		Standard	Standard		√	√
	R450		Option	Option	√	√	√

√ : Possible option

Compact terminal box

- Easy access to AVR and terminals
- Standard terminal box with possibility of mounting measurement CTs
- Possibility of current transformer for parallel operation

Environment and protection

- IP Code IP 23
- Standard winding protection for non-harsh environments with relative humidity $\leq 95\%$

Available options

- Three-phase 12-wire with 7-terminal plates
- AREP or PMG excitation
- ULc/us
- Customized painting
- Space heaters
- Droop kit for alternator paralleling
- Stator sensors
- Winding 8 optimized for three-phase 380V - 416 V / 60 Hz
- Winding protection for harsh environments and relative humidity greater than 95% (system 2 - 4 without derating)



General characteristics

Insulation class	H	Excitation system 6-wire	SHUNT	AREP / PMG
Winding pitch	2/3 (wind.6S - 6-wire / wind.6 - 12-wire)	AVR type	R150	R180
Number of wires	6-wire (12-wire option)	Excitation system 12-wire (option)	SHUNT	AREP / PMG
Protection	IP 23	AVR type	R250	R180
Altitude	≤ 1000 m	Voltage regulation (*)	± 1 %	
Overspeed	2250 R.P.M.	Total Harmonic Distortion THD (**) in no-load	< 3.5 %	
Air flow (m³/s)	1	Total Harmonic Distortion THD (**) in linear load	< 5 %	
Air flow (m³/s)	1.2	Waveform: NEMA = TIF (**)	< 50	
AREP Short-circuit current = 2.7 In : 5 second		Waveform: I.E.C. = THF (**)	< 2%	

(*) Steady state (**) Total harmonic distortion between phases, no-load or on-load (non-distorting)

Ratings 50 Hz - 1500 R.P.M.

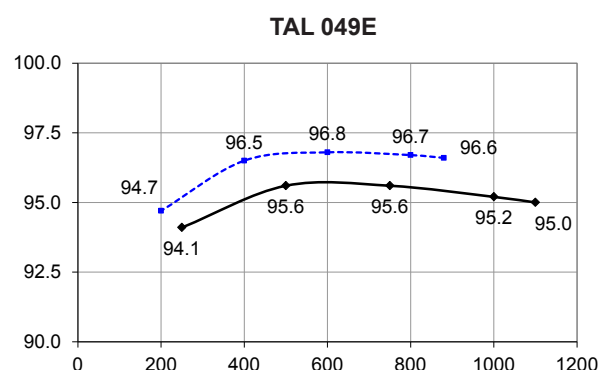
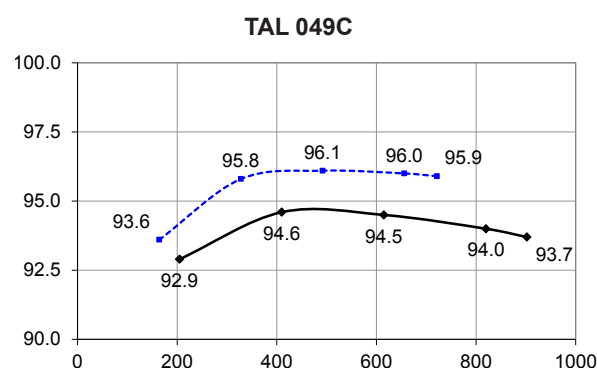
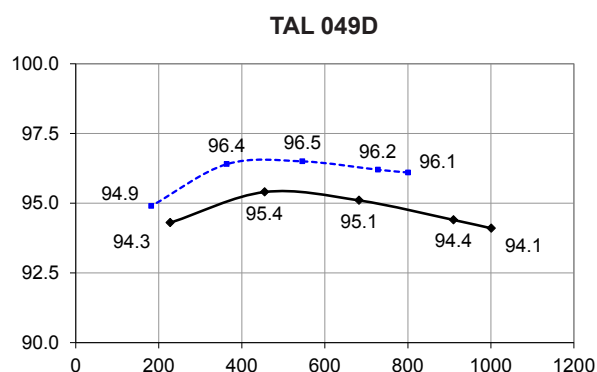
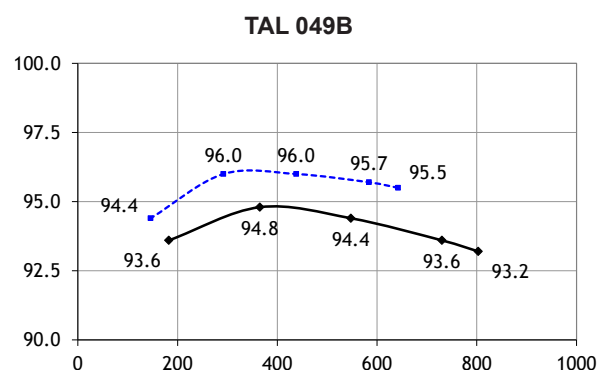
kVA / kW - P.F. = 0.8																
Duty / T° C	Continuous / 40 °C				Continuous / 40 °C				Stand-by / 40 °C				Stand-by / 27 °C			
Class / T° K	H / 125° K				F / 105° K				H / 150° K				H / 163° K			
Phase	3 ph.				3 ph.				3 ph.				3 ph.			
Y	380V	400V	415V	440V	380V	400V	415V	440V	380V	400V	415V	440V	380V	400V	415V	440V
Δ	220V	230V	240V		220V	230V	240V		220V	230V	240V		220V	230V	240V	
YY (*)				220V				220V				220V				220V
TAL 049 B kVA	730	730	730	665	665	665	665	605	775	775	775	705	805	805	805	730
kW	584	584	584	532	532	532	532	484	620	620	620	564	644	644	644	584
TAL 049 C kVA	820	820	820	810	745	745	745	735	870	870	870	860	910	910	910	890
kW	656	656	656	648	596	596	596	588	696	696	696	688	728	728	728	712
TAL 049 D kVA	910	910	910	820	830	830	830	745	965	965	965	870	1010	1010	1010	900
kW	728	728	728	656	664	664	664	596	772	772	772	696	808	808	808	720
TAL 049 E kVA	1000	1000	1000	950	910	910	910	865	1060	1060	1060	1005	1100	1100	1100	1045
kW	800	800	800	760	728	728	728	692	848	848	848	804	880	880	880	836

(*) 12-wire option

Ratings 60 Hz - 1800 R.P.M.

kVA / kW - P.F. = 0.8																
Duty / T° C	Continuous / 40 °C				Continuous / 40 °C				Stand-by / 40 °C				Stand-by / 27 °C			
Class / T° K	H / 125° K				F / 105° K				H / 150° K				H / 163° K			
Phase	3 ph.				3 ph.				3 ph.				3 ph.			
Y	380V	416V	440V	480V	380V	416V	440V	480V	380V	416V	440V	480V	380V	416V	440V	480V
Δ	220V	240V			220V	240V			220V	240V			220V	240V		
YY (*)		208V	220V	240V		208V	220V	240V		208V	220V	240V		208V	220V	240V
TAL 049 B kVA	725	795	840	915	660	725	765	835	770	845	890	970	800	875	925	1005
kW	580	636	672	732	528	580	612	668	616	676	712	776	640	700	740	804
TAL 049 C kVA	815	890	940	1025	740	810	855	935	865	945	995	1085	895	980	1040	1130
kW	652	712	752	820	592	648	684	748	692	756	796	868	716	784	832	904
TAL 049 D kVA	905	990	1045	1140	825	900	950	1035	960	1050	1110	1210	1000	1090	1155	1255
kW	724	792	836	912	660	720	760	828	768	840	888	968	800	872	924	1004
TAL 049 E kVA	990	1083	1146	1250	900	985	1045	1140	1050	1150	1215	1325	1089	1192	1260	1375
kW	792	866	917	1000	720	788	836	912	840	920	972	1060	871	954	1008	1100

(*) 12-wire option

Efficiencies 400 V 50 Hz (— P.F.: 0.8) (----- P.F.: 1)

Reactances (%). Time constants (ms) - Class H / 400 V

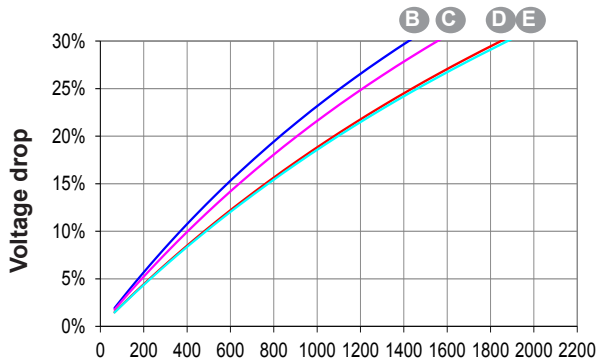
		B	C	D	E
Kcc	Short-circuit ratio	0.28	0.37	0.28	0.38
Xd	Direct-axis synchro. reactance unsaturated	403	330	402	348
Xq	Quadrature-axis synchro. reactance unsaturated	205	168	205	177
T'do	No-load transient time constant	2028	2074	2108	2153
X'd	Direct-axis transient reactance saturated	19.8	15.9	19	16.1
T'd	Short-circuit transient time constant	100	100	100	100
X''d	Direct-axis subtransient reactance saturated	15.9	12.7	15.2	12.9
T''d	Subtransient time constant	10	10	10	10
X''q	Quadrature-axis subtransient reactance saturated	18.3	14.4	16.9	14.1
Xo	Zero sequence reactance	0.82	0.66	0.79	0.67
X2	Negative sequence reactance saturated	17.1	13.5	16.1	13.5
Ta	Armature time constant	15	15	15	15

Other class H / 400 V data

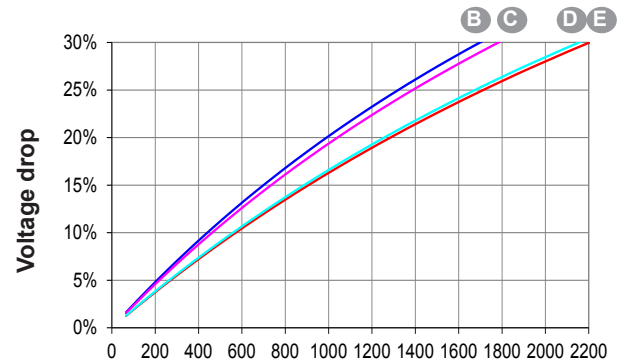
io (A)	No-load excitation current SHUNT/AREP	0.81	1.13	0.83	1.01
ic (A)	On-load excitation current SHUNT/AREP	4.15	4.76	4.15	3.9
uc (V)	On-load excitation voltage SHUNT/AREP	47.1	53.8	46.9	44.1
ms	Response time ($\Delta U = 20\%$ transient)	500	500	500	500
kVA	Start ($\Delta U = 20\%$ cont. or $\Delta U = 30\%$ trans.) SHUNT*	1084	1387	1412	1671
kVA	Start ($\Delta U = 20\%$ cont. or $\Delta U = 30\%$ trans.) AREP*	1301	1664	1695	2002
%	Transient ΔU (on-load 4/4) SHUNT - P.F.: 0.8 _{LAG}	18.1	18.5	17.5	18.6
%	Transient ΔU (on-load 4/4) AREP - P.F.: 0.8 _{LAG}	16.3	16.6	15.7	16.7
W	No-load losses	7774	10303	8702	10355
W	Heat dissipation	39606	41702	42589	39986

* P.F. = 0.6

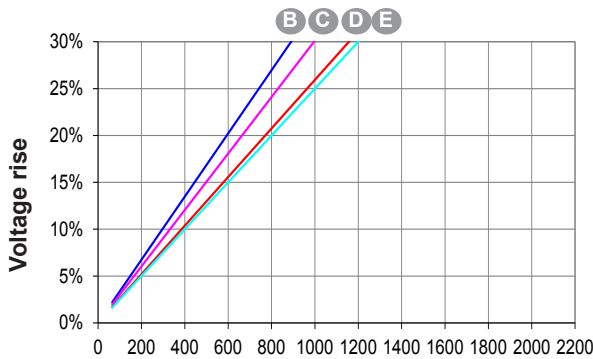
Transient voltage variation 400 V - 50 Hz



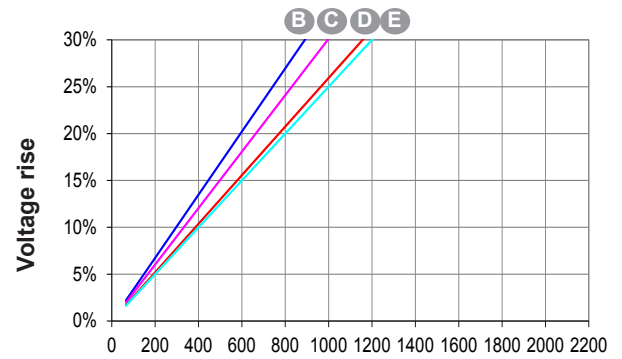
Phase loading (SHUNT) - kVA at P.F. = 0.8



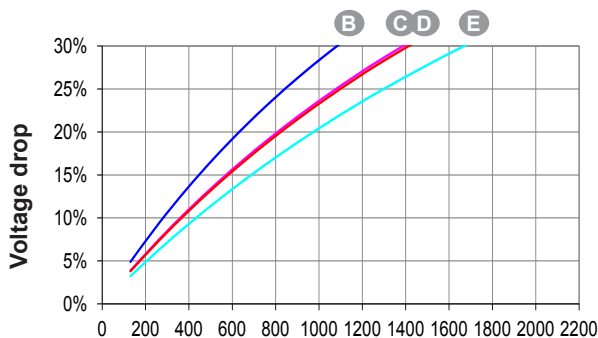
Phase loading (AREP) - kVA at P.F. = 0.8



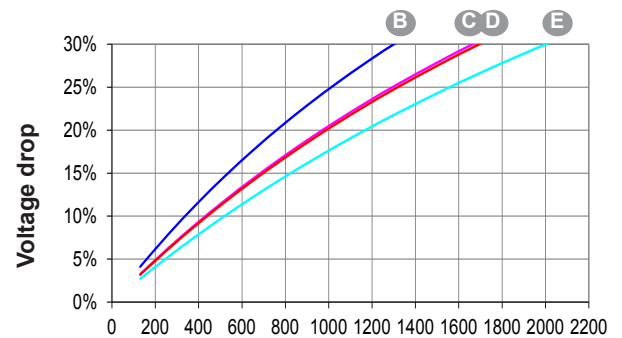
Load shedding (SHUNT) - kVA at P.F. = 0.8



Load shedding (AREP) - kVA at P.F. = 0.8



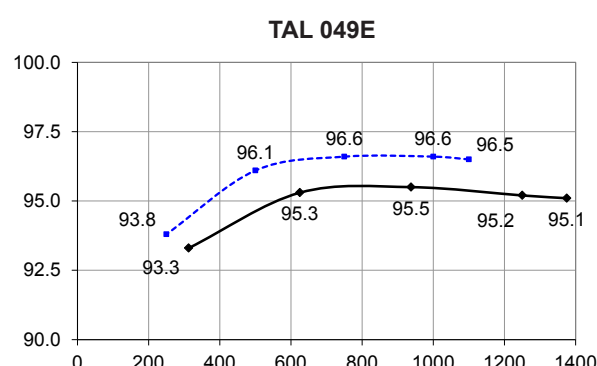
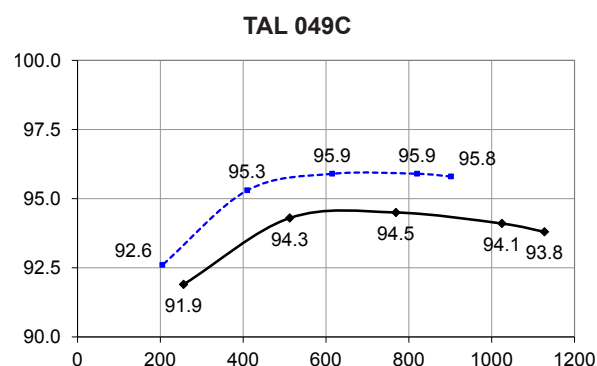
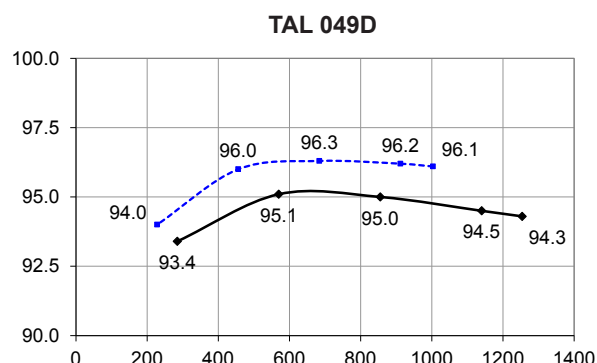
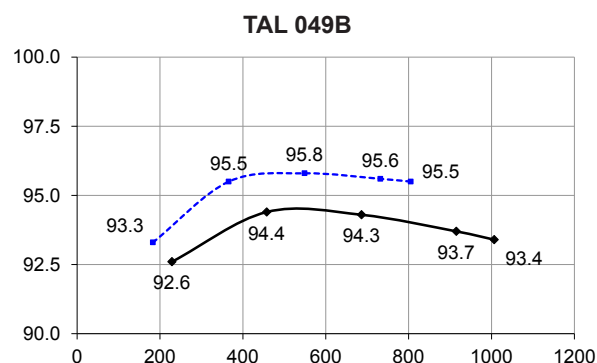
**Motor starting (SHUNT)
Locked rotor kVA at P.F. = 0.6**



**Motor starting (AREP)
Locked rotor kVA at P.F. = 0.6**

1) For a starting P.F. other than 0.6, the starting kVA must be multiplied by $K = \text{Sine P.F.} / 0.8$

2) For voltages other than 400V (Y), 230V (Δ) at 50 Hz, then kVA must be multiplied by $(400/U)^2$ or $(230/U)^2$.

Efficiencies 480 V - 60 Hz (— P.F.: 0.8) (..... P.F.: 1)

Reactances (%). Time constants (ms) - Class H / 480 V

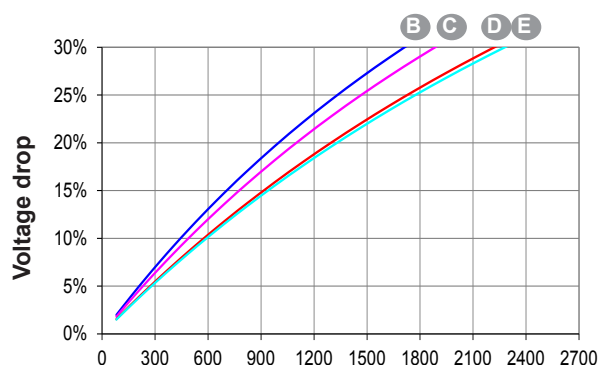
		B	C	D	E
Kcc	Short-circuit ratio	0.27	0.36	0.27	0.36
Xd	Direct-axis synchro. reactance unsaturated	421	344	419	363
Xq	Quadrature-axis synchro. reactance unsaturated	214	175	214	185
T'do	No-load transient time constant	2028	2074	2108	2153
X'd	Direct-axis transient reactance saturated	20.7	16.6	19.9	16.8
T'd	Short-circuit transient time constant	100	100	100	100
X''d	Direct-axis subtransient reactance saturated	16.6	13.2	15.9	13.4
T''d	Subtransient time constant	10	10	10	10
X''q	Quadrature-axis subtransient reactance saturated	19.1	15	17.7	14.7
Xo	Zero sequence reactance	0.86	0.69	0.82	0.7
X2	Negative sequence reactance saturated	17.8	14.1	16.8	14.1
Ta	Armature time constant	15	15	15	15

Other class H / 480 V data

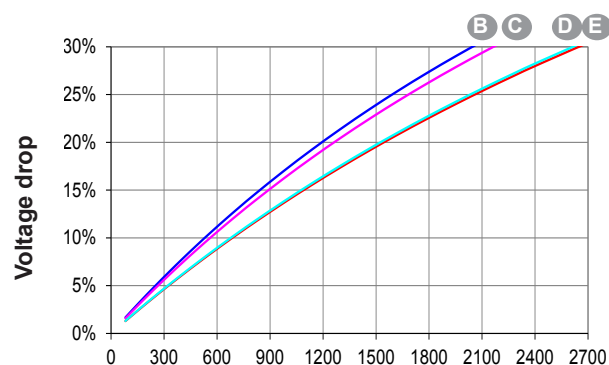
io (A)	No-load excitation current SHUNT/AREP	0.81	1.13	0.82	1.01
ic (A)	On-load excitation current SHUNT/AREP	4.28	4.87	4.26	3.98
uc (V)	On-load excitation voltage SHUNT/AREP	48.6	55.3	48.3	45.1
ms	Response time ($\Delta U = 20\%$ transient)	500	500	500	500
kVA	Start ($\Delta U = 20\%$ cont. or $\Delta U = 30\%$ trans.) SHUNT*	1300	1673	1693	2002
kVA	Start ($\Delta U = 20\%$ cont. or $\Delta U = 30\%$ trans.) AREP*	1560	2007	2031	2414
%	Transient ΔU (on-load 4/4) SHUNT - P.F.: 0.8 _{LAG}	18.7	18.9	18.1	19.1
%	Transient ΔU (on-load 4/4) AREP - P.F.: 0.8 _{LAG}	16.8	17	16.3	17.1
W	No-load losses	12224	15725	13536	15739
W	Heat dissipation	48497	51122	52250	49398

* P.F. = 0.6

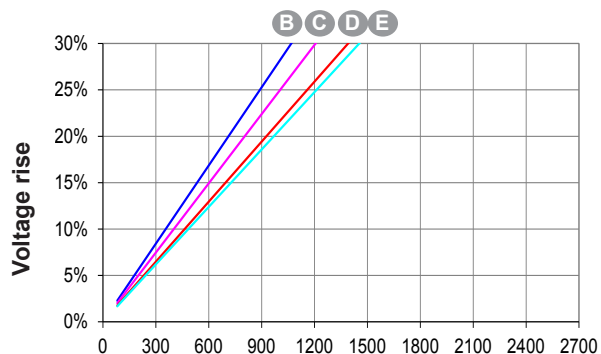
Transient voltage variation 480 V - 60 Hz



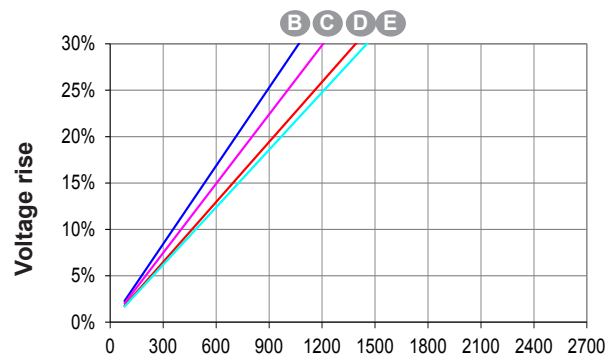
Phase loading (SHUNT) - kVA at P.F. = 0.8



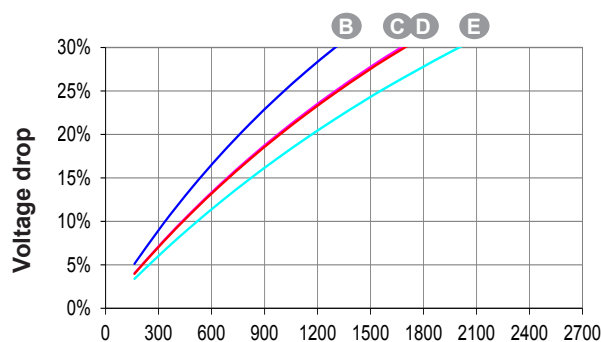
Phase loading (AREP) - kVA at P.F. = 0.8



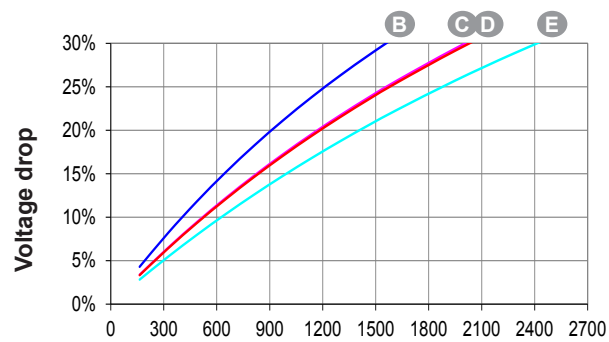
Load shedding (SHUNT) - kVA at P.F. = 0.8



Load shedding (AREP) - kVA at P.F. = 0.8



Motor starting (SHUNT)
Locked rotor kVA at P.F. = 0.6



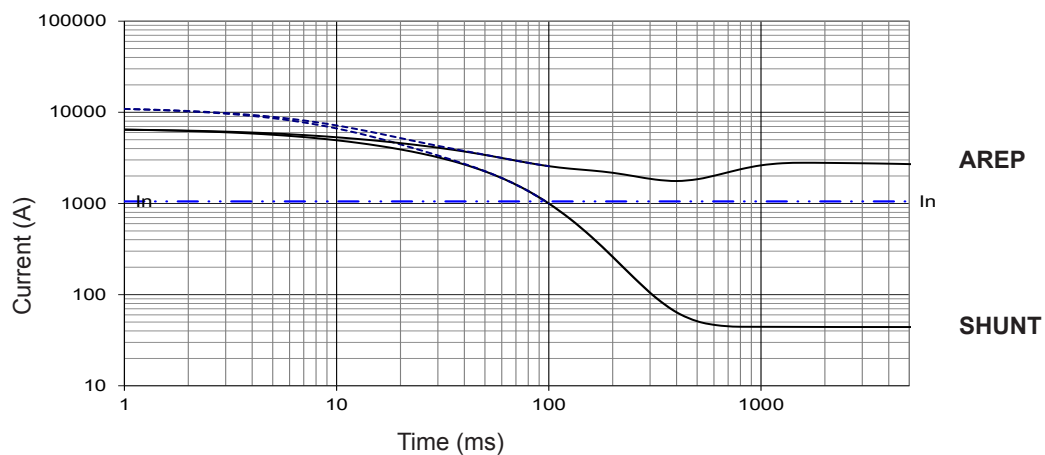
Motor starting (AREP)
Locked rotor kVA at P.F. = 0.6

- 1) For a starting P.F. other than 0.6, the starting kVA must be multiplied by $K = \text{Sine P.F.} / 0.6$
- 2) For voltages other than 480V (Y), 277V (Δ), 240V (YY) at 60 Hz, then kVA must be multiplied by $(480/U)^2$ or $(277/U)^2$ or $(240/U)^2$.

3-phase short-circuit curves at no load and rated speed (star connection Y)

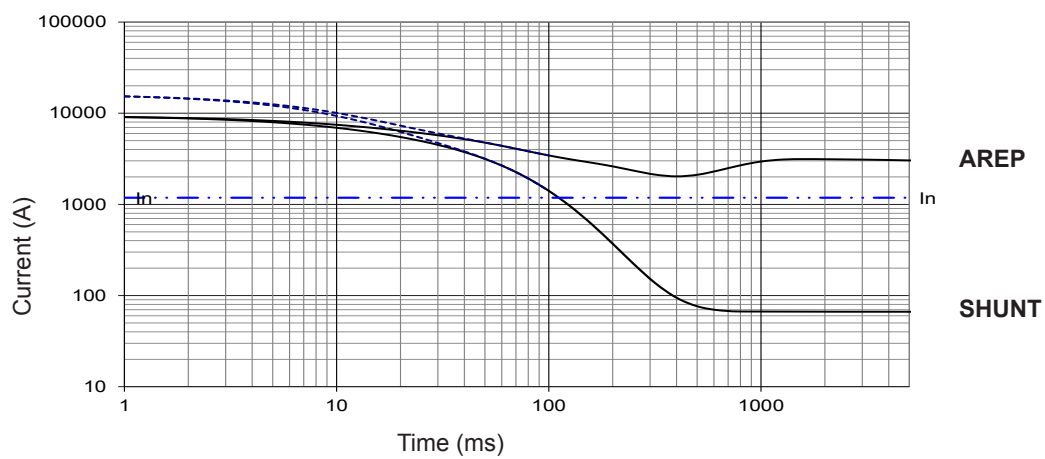
TAL 049 B

Symmetrical —
Asymmetrical - - -



TAL 049 C

Symmetrical —
Asymmetrical - - -



Influence due to connection

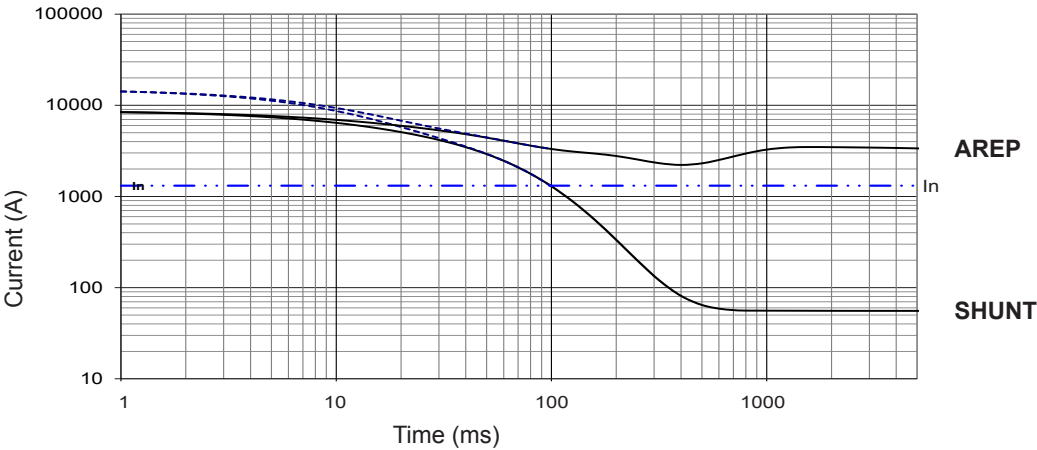
For (Δ) connection, use the following multiplication factor:

- Current value x 1.732.

3-phase short-circuit curves at no load and rated speed (star connection Y)

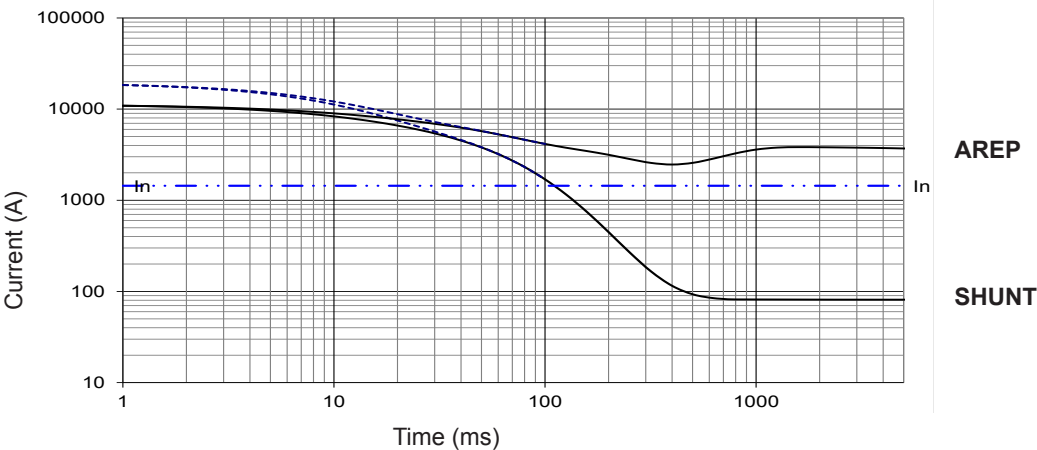
TAL 049 D

Symmetrical —
Asymmetrical - - -



TAL 049 E

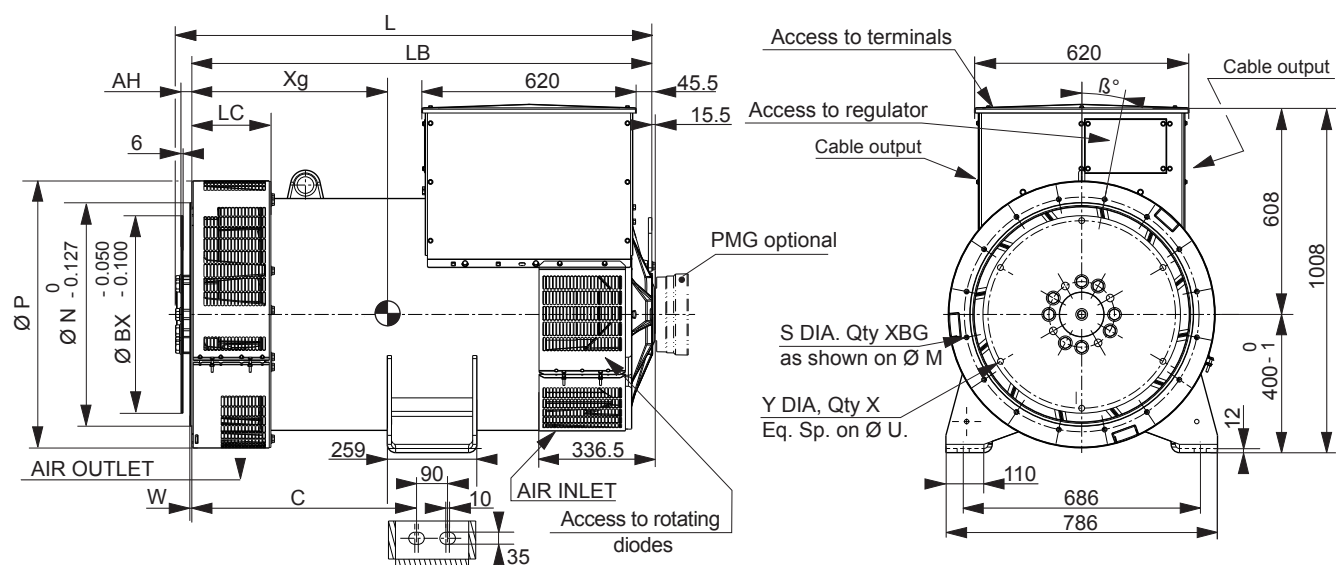
Symmetrical —
Asymmetrical - - -



Influence due to short-circuit
Curves are based on a three-phase short-circuit.
For other types of short-circuit,
use the following multiplication factors.

	3 - phase	2 - phase L / L	1 - phase L / N
Instantaneous (max.)	1	0.87	1.3
Continuous	1	1.5	2.2
Maximum duration		1.5	

Single bearing general arrangement



Dimensions (mm) and weight

Type	L without PMG	LB	C	Xg	Weight (kg)
TAL 049 B	1372	1331	650	629	1574
TAL 049 C	1372	1331	650	636	1635
TAL 049 D	1462	1421	650	673	1788
TAL 049 E	1462	1421	650	681	1837

Coupling

Flex plate	14	18
Flange S.A.E 1	X	
Flange S.A.E 1/2	X	
Flange S.A.E 0	X	X
Flange S.A.E 00		X

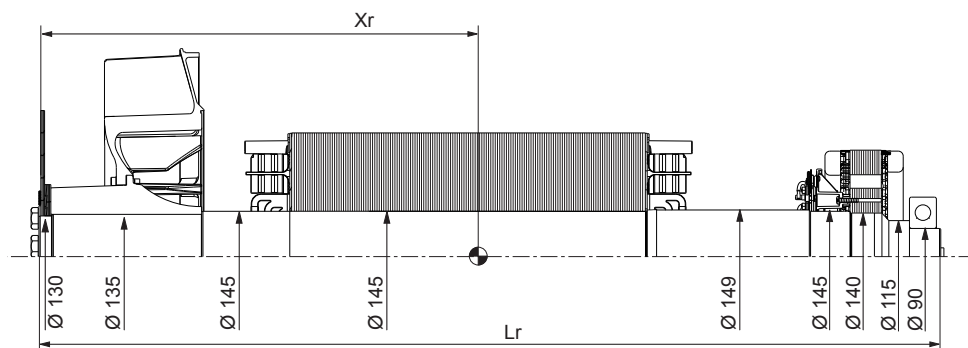
Flange (mm)

S.A.E.	P	N	M	LC	XBG	W	β°
1	773	511.175	530.225	228.5	12	6	15°
1/2	773	584.2	619.125	228.5	12	6	15°
0	773	647.7	679.45	228.5	16	6	11° 15'
00	883	787.4	850.9	245	16	7	11° 15'

Flex plate (mm)

S.A.E.	BX	U	X	Y	AH
14	466.7	438.15	8	14	25.4
18	571.5	542.92	6	17	15.7

Torsional data



Centre of gravity: Xr (mm), Rotor length: Lr (mm), Weight: M (kg), Moment of inertia: J (kgm²): (4J = MD²)

Type	Flex plate S.A.E. 14				Flex plate S.A.E. 18			
	Xr	Lr	M	J	Xr	Lr	M	J
TAL 049 B	626	1345	602	9.61	614	1345	604	9.87
TAL 049 C	634	1345	628	10.16	622	1345	630	10.42
TAL 049 D	671	1435	684	11.12	659	1435	686	11.38
TAL 049 E	681	1435	701	11.48	669	1435	703	11.74

NOTE : Dimensions are for information only and may be subject to modifications. The torsional analysis of the transmission is imperative. All values are available upon request.

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Nidec
All for dreams

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Capital social : 65 800 512 €, RCS Angoulême 338 567 258.

DSE7310/20

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES



The DSE7310 is an Auto Start Control Module and the DSE7320 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem).

The DSE7320 will also monitor the mains (utility) supply. The modules include USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion.

Both modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications, PLC functionality and dual mutual standby (DSE7310 only) to reduce engine wear.

The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

ENVIRONMENTAL TESTING STANDARDS

ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2
EMC Generic Immunity Standard for the Industrial Environment
BS EN 61000-6-4
EMC Generic Emission Standard for the Industrial Environment

ELECTRICAL SAFETY

BS EN 60950
Safety of Information Technology Equipment, including Electrical Business Equipment

TEMPERATURE

BS EN 60068-2-1
Ab/Ae Cold Test -30 °C
BS EN 60068-2-2
Bb/Be Dry Heat +70 °C

VIBRATION

BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz @ +/-7.5 mm,
8 Hz to 500 Hz @ 2 gn

HUMIDITY

BS EN 60068-2-30
Db Damp Heat Cyclic 20/55 °C @ 95% RH 48 Hours
BS EN 60068-2-78
Cab Damp Heat Static 40 °C @ 93% RH 48 Hours

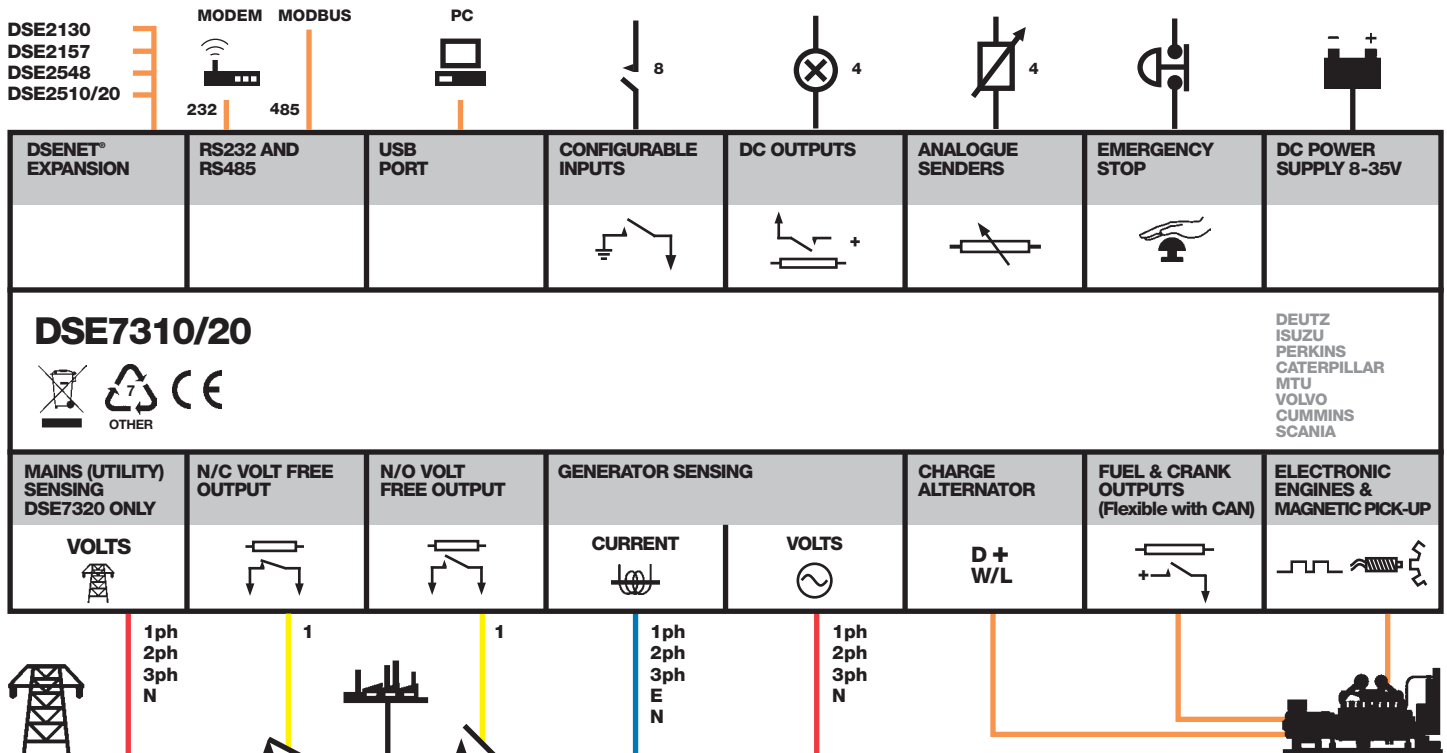
SHOCK

BS EN 60068-2-27
Three shocks in each of three major axes
15 gn in 11 ms

DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

BS EN 60529
IP65 - Front of module when installed into the control panel with the supplied sealing gasket.

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS



DSE7310/20

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES



DSE7310



KEY FEATURES

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Tier 4 CAN engine support
- Integral PLC editor
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- kW & kV Ar protection

DSE7320



- Reverse power (kW & kV Ar) protection
- LED and LCD alarm indication
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Unbalanced load protection
- Independent Earth Fault trip
- True dual mutual standby with load balancing timer (DSE7310 only)
- USB connectivity
- Backed up real time clock
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software
- User selectable RS232 and RS485 communications
- Configurable Gencomm pages
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to help with modem diagnostics
- Idle control for starting & stopping.
- DSENet® expansion compatible

KEY BENEFITS

- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Multiple date and time scheduler
- Set maintenance periods can be configured to maintain optimum engine performance
- Ethernet communications (via DSE860/865 modules), provides advanced remote monitoring at low cost
- Modules can be integrated into building management systems (BMS)
- Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements

SPECIFICATION

DC SUPPLY

CONTINUOUS VOLTAGE RATING
8 V to 35 V Continuous

CRANKING DROPOUTS

Able to survive 0 V for 50 ms, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT

340 mA at 12 V, 160 mA at 24 V

MAXIMUM STANDBY CURRENT

160 mA at 12 V, 80 mA at 24 V

CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

MAINS (UTILITY) DSE7320 ONLY

VOLTAGE RANGE
15 V - 333 V AC (L-N)

FREQUENCY RANGE

3.5 Hz to 75 Hz

OUTPUTS

OUTPUT A (FUEL)

15 A DC at supply voltage

OUTPUT B (START)

15 A DC at supply voltage

OUTPUTS C & D

8 A 250 V (Volt free)

AUXILIARY OUTPUTS E,F,G,H

2 A DC at supply voltage

GENERATOR

VOLTAGE RANGE

15 V - 333 V AC (L-N)

FREQUENCY RANGE

3.5 Hz to 75 Hz

MAGNETIC PICK UP

VOLTAGE RANGE

+/- 0.5 V to 70 V

FREQUENCY RANGE

10,000 Hz (max)

DIMENSIONS

OVERALL

240 mm x 181 mm x 42 mm
9.4" x 7.1" x 1.6"

PANEL CUT-OUT

220 mm x 160 mm
8.7" x 6.3"

MAXIMUM PANEL THICKNESS

8 mm
0.3"

RELATED MATERIALS

TITLE

DSE7310 Installation Instructions
DSE7320 Installation Instructions
DSE7200/7300 Quick Start Guide
DSE7200/7300 Operator Manual
DSE7200/7300 Configuration Suite PC Manual

PART NO'S

053-028
053-029
057-101
057-074
057-077

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