



## ACTIVE LOAD IMPACT TRANSIENT PERFORMANCE DATA

**KD3500**  
50 Hz. Diesel Generator Set  
EMISSION OPTIMIZED

### ENGINE INFORMATION

Model:	KD3500-E	Engine brand:	KOHLER
ESP Power:	3500kVA	Engine model:	KD83V16A-5CES
PRP Power:	3181kVA	Engine regulator:	KODEC
Voltage:	400V	Alternator model:	KH09260T
Frequency:	50Hz	AVR Type:	D550
ISO Performance class	G3		

### One step load acceptance (% of ESP)

One step load acceptance in G3 criteria ( $\delta U_{dyn}^- < 15\%$ & $t_U < 4s$ , $\delta f_{dyn} < 7\%$ & $t_f < 3s$ )	38% - 1069kW
One step load acceptance in G2 criteria ( $\delta U_{dyn}^- < 20\%$ & $t_U < 6s$ , $\delta f_{dyn} < 10\%$ & $t_f < 5s$ )	53% - 1472kW
Maximum one step load acceptance (out of ISO criteria)	100% - 2800kW

### Load impact transient response (PF=0.8)

Stage (% of ESP)	Power (kW)	Transient voltage deviation (%)	Voltage recovery time (s)	Transient frequency deviation (%)	Frequency recovery time (s)
0-25%	700	5	0.9	1.8	0.4
0-50%	1400	18	3.8	5.1	4.2
0-75%	2100	32	5.7	9.5	6
0-100%	2800	43	6.9	12.8	6.5