

SIEMENS

Reference List AC Variable Speed Drives with SINAMICS GM150 and SIMOVERT MV in the Water Sector incl. Cooling Pumps and District Heating Pumps PWM Medium-Voltage Drive Converters

Date of Issue: 06 November 2006

No.	Year of Order	Qty	Rating [MW]	Speed Range [RPM]	Rated Voltage [kV]	Drive Type	Converter Cooling	Driven Machine	Customer	Country (Plant Location)
SINAMICS GM150										
	2005	2	1.325	250 - 750	3.3	DFE	Air	Water pump	Canal de Isabel II	Spain
	2006	1	1.883	- 1485	4.16	DFE	Water	District heating pump	Elsam Kraft A/S, Herningværket	Denmark
	2006	2	1.8	- 1500	4.16	DFE	Air	Waterpump	Aguas de la Cuenca del Norte S.A. (ACUNOR)	Spain
	2006	2	2.5	- 1500	4.16	DFE	Air	Waterpump	Aguas de la Cuenca del Norte S.A. (ACUNOR)	Spain
SIMOVERT MV										
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	1999	2	1.88	120 - 1200	6.0	DFE	Air	Pump	Taguaza Pump Station	Venezuela
	2000	2	1.7	1000 - 3000	3.3	DFE	Air	Boiler Feed Pump	Wienstrom, Donaustadt Block 3	Austria
	2000	2	1.3	- 1500	3.3	DFE	Air	Cooling Water Pump	Wienstrom, Donaustadt Block 3	Austria
	2000	1	0.75	120 - 1200	4.16	DFE	Air	Water Pump	Tampa City Water Authority	USA
	2000	1	0.37	120 - 1200	2.3	DFE	Air	Pump	B&C / City Of Mineral Wells, TX	USA
	2000	1	0.3	100 - 1000	4.16	DFE	Air	Pump	Lee Corp / NWC / Kingston	Jamaica
	2000	1	0.5	100 - 1000	4.16	DFE	Air	Pump	Lee Corp / NWC / Kingston	Jamaica
	2000	1	0.68	5 - 66 Hz	3.3	DFE	Air	Heating water pump	Baotou Power Plant	P.R. China
	2000	2	0.71	5 - 70 Hz	3.3	DFE	Air	Pump	Guiyang Water Works	P.R. China
	2000	2	1.06	280 - 960	3.3	DFE	Air	Irrigation pump	WEIR Engineering, Loxton Irrigation 1/2	Australia
	2000	2	1.2	- 66 Hz	3.3	DFE	Air	Pump	Dalian International Company, Dalian Water	P.R. China
	2000	2	3.1	- 990	4.16	DFE	Air	Pump	Liaoning Mec Group Co. Ltd., Dalian Yingna River	P.R. China
	2001	1	2.3	1800 - 3600	4.16	DFE	Air	Water Pump	American Hoeganaes	USA
	2001	1	1.85	670 - 1490	3.3	DFE	Air	Heating water pump	Warszawskie S.A., EC Siekierki	Poland
	2001	1	0.9	1 - 100%	3.3	DFE 24	Air	Pump	South China Power Engineering Co. Ltd., Dongguan	P.R. China
	2001	1	1.5	225 - 450	4.16	DFE	Air	Test bed pump	Flowserve SA de CV	Mexico
	2001	4	2.0	250 - 375	4.16	DFE	Air	Pump	Los Pelambres	Chile
	2001	2	0.63	20 - 100%	6.0	DFE	Air	Pump	Shangdong Zouxian Power Plant	P.R. China
	2001	1	2.25	20 - 100%	3.3	DFE	Air	Pump	Baotou No. 1 Power Plant	P.R. China
	2001	2	1.65	44 - 442	3.3	DFE	Air	Pump	ECOTEK Kaohsiung	Taiwan
	2002	3	0.65	50 - 100%	3.3	DFE	Air	Water Pump	PT Thames PAM Jaya	Indonesia
	2002	1	1.2	50 - 100%	3.3	DFE	Air	Water Pump	PT Thames PAM Jaya	Indonesia
	2002	1	0.9	50 - 600	4.16	DFE	Air	Water Pump	Metropolitan Water Authority, Bangkok 1	Thailand
	2001	1	1.35	60 - 580	4.16	DFE	Air	Supply Water Pump	DPS-IMS / City of Atlanta	USA
	2001	1	1.5	75 - 720	4.16	DFE	Air	Supply Water Pump	DPS-IMS / City of Atlanta	USA
	2001	1	1.9	50 - 475	4.16	DFE	Air	Supply Water Pump	DPS-IMS / City of Atlanta	USA
	2001	1	2.5	10 - 100%	3.3	DFE	Air	Water pump	MECC (WISCO, Wuhan)	P.R. China

DFE → Diode Front End, 12-pulse
DFE 24 → Diode Front End, 24-pulse
AFE → Active Front End

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SIMOVERT MV										
2002	2	0.98	20 - 100%	6.0	DFE	Air	Condensation Pump	Xuzhou Power Plant, China	Water Resources & Electric Power	P.R. China
2002	3	0.9	300 - 600	3.3	DFE	Air	Water pump	MWA, Minburi Plant, Bangkok		Thailand
2002	2	0.8	250 - 742	3.3	DFE	Air	Pump	Fuzhou Water Supply and Wastewater Treatment		P.R. China
2002	2	1.06	1 : 3	3.3	DFE	Air	Water supply pump	Shenzhen Baoan Zhuoao Water Supply Plant		P.R. China
2003	9	1.5	257 - 514	4	DFE	Air	Pump	IMC Phosphates		USA
2003	8	0.95	360 - 990	3.3	DFE	Air	Centrifugal Pump	Sulaibiya Waste Water Treatment & Reclamation Plant		Kuwait
2003	6	1.5	300 - 500	2.3	DFE	Water	Pump	Ardiya Pumping Station		Spain
2003	1	0.5	1 : 5	6.0	DFE	Air	Pump	UTE Rialp (Casega), Lleida		P.R. China
2003	8	2.2	20 - 60 Hz	2.3	DFE	Water	Water pump	Yuanbaoshan Power Plant		P.R. China
2003	24	1.6	20 - 60 Hz	2.3	DFE	Water	Water pump	AL Hunayy, MAW		Saudi-Arabia
2003	1	0.8	300 - 1000	6.0	DFE	Air	Fan	AL Hunayy, MAW		Saudi-Arabia
2003	2	2.5	25 - 50 Hz	6.0(4.16)	DFE	Water	Feed water pump	Yancheng Water		P.R. China
2003	3	2.8	2700 - 3600	4.16	DFE	Air	Pump	Vilniaus Energija		Lithuania
2003	2	2.75	99 - 992	4.16	DFE	Air	Water pump	APP, Jiang Lin 1-3		P.R. China
2003	1	0.55	0 - 990	6.0	DFE	Air	Water Pump	Dalian Yingna River No.2		P.R. China
2004	3	0.8	70 - 100%	3.3	DFE	Air	Water Pump	Mudanjiang Water		P.R. China
2004	1	2.8	2700 - 3600	4.16	DFE	Air	Pump	Shenzhen Bijiashan Water Works		P.R. China
2004	1	1.2	500 - 1000	6.0(2.3)	DFE	Air	Centrifugal pump	APP		P.R. China
2004	2	1.25	1 : 10	6	DFE	Air	Pump	Palas Constanza District heating pump		Romania
2005	2	2.34	- 2980	3.3	DFE	Air	Pump	Taiyuan Heating Co.		P.R. China
2005	1	2.4	500 - 1100	4.16	DFE	Air	Centrifugal Pump	Anshan Steel No.1 Power Plant		P.R. China
2005	2	0.93	0 - 2400	4.0	DFE	Air	Extruder	Norsk Hydro		Norway
2005	1	1.25	1 : 10	6.0	DFE	Air	Pump	DuPont		USA
2005	4	2.2	300 - 1000	2.3	DFE	Water	Pump	Taiyuan Heating Co.		P.R. China
2005	1	0.8	1 : 10	6.0	DFE	Air	Pump	Canal de Isabel II		Spain
2005	4	0.81	1 : 10	2.3	DFE	Air	Pump	Suzhou Baiyangwan Water Plant		P.R. China
2005	1	0.81	1 : 10	6.0	DFE	Air	Pump	Beijing Heating Supply Co.		P.R. China
2005	1	0.81	1 : 10	6.0	DFE	Air	Pump	Shandong Haihua		P.R. China
2006	1	0.81	1 : 10	6.0	DFE	Air	Pump test bed	Boshan Pumps Works		P.R. China

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