

TECHNICAL SPECIFICATIONS OF OPTICAL EQUIPMENT

					016	021	025	032	040	050	064	
OPSP	Pump	Type			Horizontal multistage end-suction							
		Qty			1							
		Manufacturer			Grundfos							
		Model			CM5-3		CM5-4		CM10-2			
		Efficiency		%	-		77.4		79.6			
		Efficiency level			IE2							
		Rated speed		rpm	2770-2820		2840-2870		2820-2860			
		Rated output		kW	0.65		0.85		1.2			
	Water circuit	Safety valve		bar	3.0							
		Manometer			Yes							
		Expansion vessel	Volume	l	10				12			
			Pre-pressure	bar	1.0							
	Nom. External Static Pressure	Cooling (1)	kPa	202	169	128	142	232	198	169		
	Weight of unit	Machine net weight		kg	276	328	328	408	596	596	754	
Packed machine weight			kg	303	355	355	440	641	641	807		
Operating weight			kg	279	331	331	412	602	602	762		
OPHP	Pump	Type			Horizontal multistage end-suction							
		Qty			1							
		Manufacturer			Grundfos							
		Model			CM5-5				CM10-3			
		Efficiency		%	79.6				83.2			
		Efficiency level			IE2							
		Rated speed		rpm	2820-2860				2890-2920			
		Rated output		kW	1.2				2.2			
	Water circuit	Safety valve		bar	3.0							
		Manometer			Yes							
		Expansion vessel	Volume	l	10				12			
			Pre-pressure	bar	1.0							
	Nom. External Static Pressure	Cooling (1)	kPa	382	343	292	221	384	338	284		
	Weight of unit	Machine net weight		kg	279	332	332	411	604	604	763	
Packed machine weight			kg	306	359	359	443	648	648	815		
Operating weight			kg	282	335	335	415	610	610	771		
OP10	Operation range	Ambient	Min	°CDB	refer to "operation range"							
OPZL	Operation range cooling	Ambient	Min	°CDB	refer to "operation range"							
		Waterside	Min	°C	refer to "operation range"							

ELECTRICAL SPECIFICATIONS OF OPTICAL EQUIPMENT

					016	021	025	032	040	050	064
OPSP											
Current	Maximum starting current (cooling/heating)			A	(7)	79.5	80.5	90.5	102.8	104.9	123.7
	Maximum running current			A	24.0	27.1	28.2	37.0	50.4	52.6	70.2
	Recommended fuses			A	25	32	32	40	63	63	80
OPHP											
Current	Maximum starting current (cooling/heating)			A	(7)	79.9	81.7	91.7	103.7	106.3	125.1
	Maximum running current			A	24.4	27.5	29.4	38.2	51.3	54.0	71.6
	Recommended fuses			A	32	32	32	40	63	63	80
OP10											
Cable requirements	Water piping heater output	Quantity of wires			2						
		Maximum running current			1A						
EKRP1AHT*											
Cable requirements	Thermostat ON/OFF signal	Quantity of wires			2						
		Maximum running current			Minimum cable section 0.75 mm ²						
	Thermostat cooling/heating signal	Quantity of wires			2						
		Maximum running current			Minimum cable section 0.75 mm ²						
	Operation ON signal	Quantity of wires			2						
		Maximum running current			Minimum cable section 0.75 mm ²						
	Operation OFF signal	Quantity of wires			2						
		Maximum running current			Minimum cable section 0.75 mm ²						
EKRUAH*											
Cable requirements	Secondary remote control	Quantity of wires			2						
		Maximum running current			Minimum cable section 0.75 mm ²						

NOTES

1. Additional or different specs compared to standard