

Calio SI DCS – High-efficiency Circulator



80% Energy
Conservation

Applications:

- Combi Systems

More information:
www.ksb.com.tr



Calio SI DCS – High-efficiency Circulator

1 Cost-efficient

- Maximum operating cost savings by high-efficiency technology combined with speed control

2 Easy to operate

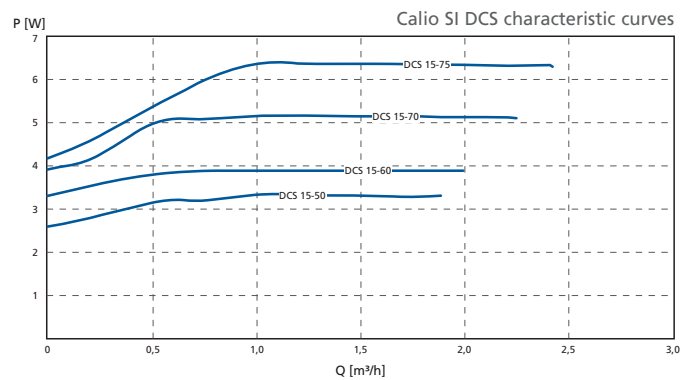
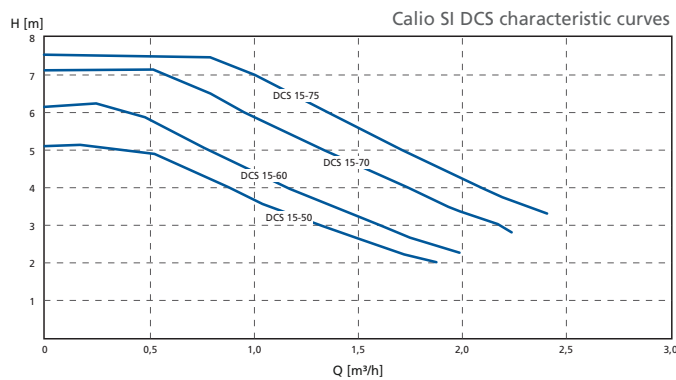
- PWM Control for combi systems
- Plug & pump: easy to install and operate
- Automatic rotor deblocking system
- Soft start function
- Low noise due to 6-pole rotor and optimised minimum cogging torque

3 Economical

- High-efficiency wet rotor motor: EEI < 0.23
- Maintenance-free

4 Reliable

- Use of ferrite magnets to reduce magnetite problems
- Increased corrosion protection through totally enclosed rotor
- Full motor protection with integrated electronics
- Long service life thanks to ceramic bearings

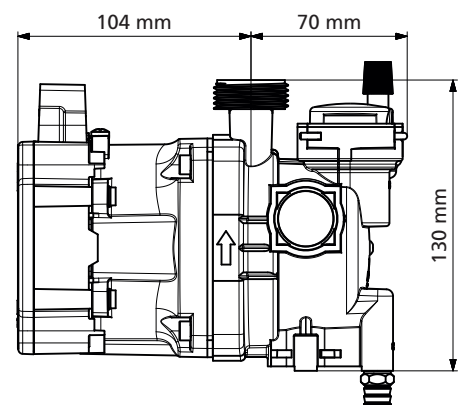
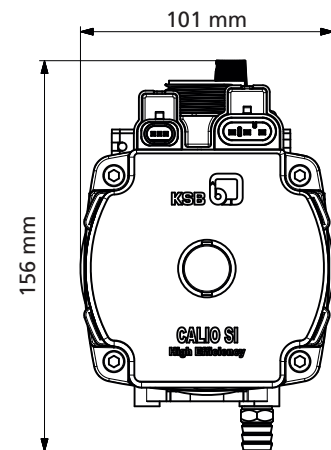


Technical Data

Type Series	Calio SI DCS
Flow Rate	Up to 2,4 m³/h
Head	Up to 7,5 m
Fluid Temperature	-10 to +95 °C
Ambient Temperature	0 to +70 °C
Operating Pressure	PN3
Sound Pressure Level	< 43 dB
Enclosure	IP 44
EEI	≤ 0,23

Size

Size	V/Hz	Q(m³/h)	H(m)	P(W)	I(A)	Length
DCS 15-75	230/50	2,40	7,50	62,00	0,53	130 mm
DCS 15-70	230/50	2,25	7,00	52,00	0,45	130 mm
DCS 15-60	230/50	2,00	6,00	39,00	0,35	130 mm
DCS 15-50	230/50	1,90	5,00	33,00	0,29	130 mm

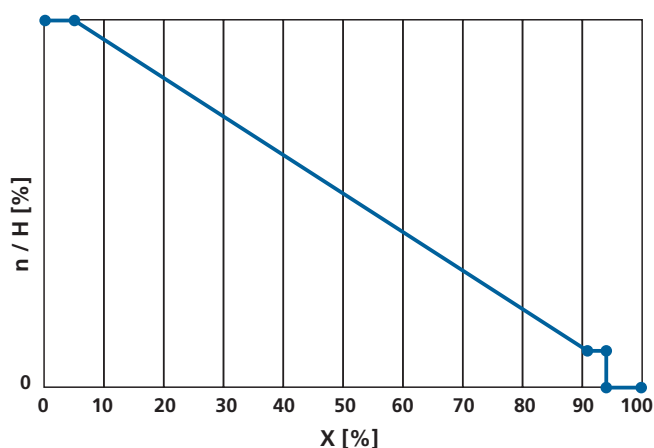


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Operation with PWM profile A (heating applications)

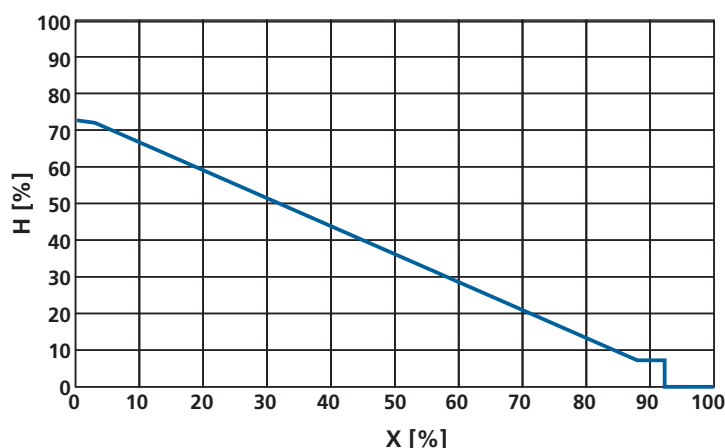
Parameters sent by external control system

Parameter	PWM signal	Comments
	(%)	
Maximum speed	0-5	No PWM signal connected: The pump set is operated at maximum speed.
Pump ID	95-100	-
Modulation	5-90	-
Stand-by	92-100	The pump set can also be controlled when in stand-by mode.



n Speed X PWM

PWM signal from external control system to pump control system



H Head X PWM

PWM profile A, PWM signal from pump control system to external control system

Parameter/function	PWM Output signal	Comments	Priority
	(%)		
Standby by PWM Signal	95		1
Alarm, Blocked Rotor	90		3
Alarm, Electrical Error	85	Vac>272 or Vac<168	4
Dry Warning	80		2
Warning	75	181<Vac<208 or 251<Vac<272	5
Modulation	0-70	Estimated Flowrate	6

Note: Operated Voltage is 211<Vac<248.

Speeds depending on the size

Size	Speed	
	Minimum [rpm]	Maximum [rpm]
15-75	800	3750



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