

Kenrahn **LCS**, (**L**evel **C**ontrol **S**tarter) has been developed over many years to provide the most reliable electronic method of controlling submersible bore hole pumps in harsh rural conditions and varying types of water. The standard economy unit incorporates a magnetic contactor and an electronic water level sensor to suit one or two probe systems which can be added to suit your requirements.

General information

Although the economy model in a plastic enclosure is very popular, it is limited with the number and type of options available. The model shown in a weather proof powder coated metal enclosure can have many options, like inbuilt low pressure protection for broken pipes or loss of prime cut out.

The standard models have test push buttons to enable manual starting and stopping of the pump when the level is between the top and bottom probe.

The buttons can be used in one probe installations to manually start the pump and have it stop automatically when the level falls below the probe. This method is not suitable for fully automatic systems that need to re-start after power failure without operator intervention.

The LCS family can grow to become fully automatic transfer pump systems with level switches in distant tanks which are kept full from bores or wells.

A capacitor start box from the pump supplier may be required for 3 wire 240 Volt submersible pumps.

STANDARD VERSION

MODEL	VOLTS	TYPE	REMARKS
LCS-2D	240V	Direct On Line	Standard model in metal enclosure incorporating a motor starter with Thermal Overload, Manual-Off-Auto selector, test push buttons, indicators for low level and overload operated by an electronic probe sensing relay to stop the pump on level fall and restart on level rise. If a one probe method is used, the start button will need to be pressed to re-start the pump after level fall or power fail.
LCS-6D	415V	Direct On Line	
LCS-SD	415V	Star Delta	
LCS-AT	415V	Auto Transformer	
LCS-SS	415V	Soft Starter	

Economy Models

MODEL	Amp	Volts	Overload	H x W x D	REMARKS
LCS-2D19AE	19	240	nil	340 x 210 x 160	Economy LCS in a IP54 Plastic enclosure.
LCS-2D30AE	30	240	nil	340 x 210 x 160	Suitable for one or two probe systems

MODEL	kW	Volts	Overload	H x W x D	REMARKS
LCS-6D50E	4.0	415	7 - 11	340 x 210 x 160	Economy LCS in a IP54 Plastic enclosure.
LCS-6D54E	5.5	415	7 - 11	340 x 210 x 160	With Thermal Overload
LCS-6D61E	7.5	415	7 - 11	340 x 210 x 160	Suitable for one or two probe systems

Options

CODE	-E	OPTION
ACT		Ammeter CT operated
HRM	*	Hours Run Meter
TC	*	24 Hour Daily Time Clock
NFT	*	No Flow Circuit and time delay
LPTD		Low pressure switch and time delay
LPT	*	Low pressure circuit for external pressure sw.
TX	*	24 Volt ac 40 VA transformer for safety.
HPTD		High pressure switch and time delay
HPT	*	High pressure circuit for external pressure sw.
HLC		High level circuit for distant tank.
DTC	*	Digital time clock for starting and stoping
28TC	*	28 Hour time to limit the operating time.
CB1		Single pole circuit breaker for added protection
CB3		Three pole circuit breaker for added protection

2 Wire Probe

2 Wire Probes

MODEL	Cable Length		REMARKS
	Metres	Feet	
LP20	20	65	2 Wire stainless steel conductivity probe.
LP30	30	98	
LP40	40	131	
LP50	50	164	
LP60	60	196	16 mm Diameter. 5/8 inch
LP70	70	229	
LP80	80	262	
LP90	90	295	
LP100	100	328	Brown wire to centre electrode. Blue wire number 1 connected to outer sheath.
LP120	120	393	
LP140	140	459	
LP160	160	524	
LP180	180	590	
LP200	200	656	

LCS-2DNF

