



**C.R.I. PUMPS**  
Pumping trust. Worldwide.



## Centrifugal Monoblock Pumpsets

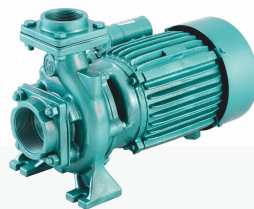
### ACM & VIRAT Series

C.R.I. Centrifugal Monoblock pumpsets are powered by a totally enclosed fan cooled AC induction two pole motor. Motor stator is made of low watt loss silicon steel laminations assembled under pressure and rigidly locked in the frame. The windings are of high-grade enameled copper wire offer excellent resistance and are varnish impregnated. Construction of motor frame and usage of quality materials result in high performance and low temperature rise thereby increasing the life cycle of the motor.

**Virat**



**ACM Series**



### SALIENT FEATURES

- High operating efficiency resulting in lower power consumption
- Good suction lift characteristics
- Inbuilt with thermal overload protector in all single phase pumpsets upto 2 HP
- Specially designed for wide voltage operation
- SS 304 impellers are used in specific pump models to increase the life of the pump
- Dynamically balanced rotating parts including rotor and impeller ensures minimum vibration and longer life
- Back pull-out design for easy servicing and repair
- Double shielded ball bearings, so no need of external lubrication
- Available in CI & Aluminium frame

APPLICATIONS : · Domestic · Irrigation · Farms · Gardens · Industry · Civil applications

## SPECIFICATIONS

### ACM SERIES

### VIRAT SERIES

Power range	0.37 kW - 2.2 kW (0.5 HP - 3 HP)	0.37 kW - 1.5 kW (0.5 HP - 2 HP)
Speed	2880 RPM	
Version	1Ph - 220 - 240V; 3Ph - 380 - 415V, 50Hz AC Supply.	
Maximum total head	60 metre	34 metre
Maximum flow rate	18 lps (64.8m <sup>3</sup> /hr)	9 lps (32.4m <sup>3</sup> /hr)
Maximum suction lift	7 metre	
Degree of protection	IP 44 / IP 54	
Class of insulation	B	
Maximum ambient temperature	40°C	
Sealing	Mechanical seal	
Type of duty	S1 (Continuous)	
Method of starting	Permanent Split Capacitor (PSC)	
Direction of rotation	1Ph - Clockwise from driving end; 3Ph - Electrically reversible	
Nominal pumpset size (Suction x Delivery)	25 x 25, 32 x 25, 40 x 32, 40 x 40, 50 x 40, 50 x 50, 65 x 50, 80 x 65, 80 x 80, 100 x 80 & 100 x 100 mm	

## PERFORMANCE CHART

### ACM SERIES

### SINGLE STAGE CENTRIFUGAL MONOBLOCK PUMPSETS

2880 RPM, At Rated Voltage - Single Phase -220 - 240 Volts;  
Three Phase - 380 - 415 Volts, 50Hz, A.C. Supply.

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																Star Rating	
						0	1.4	2.2	2.6	3.8	4.2	4.6	5.4	6.1	6.8	7.6	8.3	9.0	9.7	10.4	11.2		11.9
ACM-0*	CI	0.37	0.5	25x25	lps	0	0.4	0.6	0.7	1.0	1.2	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	
ACM-2S	CI	0.37	0.5	25x25	Head in Metres	19	18	17	16	15	15	14	13	9	8								5
ACM-44	CI	0.55	0.75	25x25	Head in Metres	35		30	29	28	28	28	26	17	18								5
T/ACM-2	AL	0.75	1	25x25	Head in Metres	31		28	27	26	25	25	24	23	18	13							
ACM-24	CI	0.75	1	25x25	Head in Metres	34	31	31	30	30	30	30	25										
ACM-28 / T/ACM-28	AL	1.1	1.5	32x25	Head in Metres	43				38	37	37	36	35	35	34	33	32	31	30	28	23	

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE													
						0	8	10	11	12	13	14	15	16	17	18	19	20	
ACM-60 WV/ES	CI	0.37	0.5	50x50	lps	0	2.2	2.8	3.1	3.3	3.6	3.9	4.2	4.4	4.7	5.0	5.3	5.6	
					Head in Metres	14	13	13	13	13	12	12	12	11	11	10	10	9	

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE															
						0	10.8	14.4	18.0	21.6	25.2	28.8	32.4	36.0	39.6	43.2	46.8	50.4			
T/ACM-6 / S-ACM-6 SPL	CI	0.75	1	50x50	lps	0	3	4	5	6	7	8	9	10	11	12	13	14			
ACM-40(S) WV / LV	CI/AL	0.75	1	80x80	Head in Metres	13	12	12	11	10	8										
S/ACM-18 SPL	CI	1.1	1.5	50x40	Head in Metres	9			9	9	8	8	8	7	7	6	6				
S/ACM-9 SPL	CI	1.1	1.5	50x50	Head in Metres	23	18	15	11												
S/ACM-20 SPL	CI	1.1	1.5	65x50	Head in Metres	17		14	12	11	8	4									
ACM-42	AF	1.1	1.5	80x80	Head in Metres	15	15	14	14	14	13	11	8								
S/ACM-19 / ACM-19*	CI	1.5	2	50x50	Head in Metres	14	13	13	13	12	12	11	10	9	8	8	6	5			
T/ACM-19 / S/ACM-19 SPL	CI	1.5	2	50x50	Head in Metres	24	21	20	19	16	14										

\* Marked pumpsets are having ISI licence

WV - Wide voltage operation LV - Low voltage operation ES - Extension Shafts available S - Sleek H - High head

# PERFORMANCE CHART

## ACM SERIES

### SINGLE STAGE CENTRIFUGAL MONOBLOCK PUMPSETS

2880 RPM, At Rated Voltage - Single Phase -220 - 240 Volts;  
Three Phase - 380 - 415 Volts, 50Hz, A.C. Supply.

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																		
						0	10.8	14.4	18.0	21.6	25.2	28.8	32.4	36.0	39.6	43.2	46.8	50.4	54.0	57.6	61.2	64.8		
						lps	0	3	4	5	6	7.1	8	9	10	11	12	13	14	15	16	17	18	
ACM-54		0.75	1	80x80	Head in Metres	13			12	11	11	10	10	9	8	8	7	6						
ACM-51 / ACM-51WV	AF	0.75	1	80x80		9							9	8	8	7	7	6	5					
S/ACM-21 / ACM-21* /SW/ACM-21	CI	1.5	2	65x50		22	21	20	19	18	17	15	12	9										
ACM-22*	CI	1.5	2	80x65		16							12	11	10	9	8	7						
SW/ACM-58 -ES	CI	1.5	2	80x65		16						14	13	12	11	9								
SW/ACM-59 - ES	CI	1.5	2	80x80		15						14	13	12	11	9								
S/ACM-23 / ACM-23* /SW/ACM-23	CI	1.5	2	80x80		17		15	15	14	14	13	12	11	10	9	8	7	6					
ACM-23S WV	CI	1.5	2	80x80		15						12	12	11	10	10	9	8	7	6	5			
ACM-62	CI	1.5	2	80x80		14			13	12	12	11	10	9	8	8	6	5						
ACM-36	CI	1.5	2	100x100		15			14	14	14	14	13	13	12	12	11	10	9	8	7			
S/ACM-47 / T/ACM-47 /S/ACM-47 SPL	CI	2.2	3	50x50		36			31	13	8													
S/ACM-29 / ACM-29*	CI	2.2	3	65x50		25				23	22	21	19	17	15	13	11							
S/ACM-30 / ACM-30*	CI	2.2	3	80x65		19.5			18	18	18	17	17	16	16	15	14	13	12	11				
S/ACM-31 / ACM-31	CI	2.2	3	80x80		19							17	16	15	14	13	12	11	10	9	8		
S/ACM-34	CI	2.2	3	100x100		16				15	15	15	14	14	14	13	13	12	11	10	9	7		
ACM-64	CI	2.2	3	100x100		15			14	14	14	14	13	13	12	12	11	10	9	8	7			

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																					
						0	4	6	8	10	11	12	13	18	20	22	24	24	25	27	32	34	38	40	45		
						lps	0	1.1	1.7	2.2	2.8	3.1	3.3	3.6	5.0	5.6	6.1	6.7	6.8	6.9	7.5	8.9	9.4	10.6	11.1	12.5	
ACM-40 WV ES / WV	AL	0.75	1	80x80	Head in Metres	13											12	11	11	11	11	10	9	9	8	7	6
S/ACM-45	CI	2.2	3	50x40		37						33	33	32	30	28	26	23	20								

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																		Star Rating			
						0	1.4	2.2	2.6	3.8	4.2	4.6	5.4	6.1	6.8	7.6	8.3	9.0	9.7	10.4	11.2	11.9	12.6		13.3		
						lps	0	0.4	0.6	0.7	1.0	1.2	1.3	1.5	1.7	1.8	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7		
ACM A0*	AI	0.37	0.5	25x25	Head in Metres	18		16	16	14	13	13	12														
ACM A1* WV / ES	AL/CI	0.37	0.5	25x25		20		20	20	18	18	17															
ACM A1	AL/CI	0.37	0.5	25x25																							
ACM A2S	AL	0.37	0.5	25x25		27		24	23	22	21	20	19	13													5
ACM A12	CI	0.37	0.5	40x40												14	14	13	13	113	12	12	12	11	10		
ACM A25	CI	0.37	0.5	32x25		22			20	19	19	18	17	17	16	15											
ACM A48 WV / DF / ES	CI	0.37	0.5	40x40		16										12	12	12	11	11	10	9	9	8	7		
ACM A2*	AL/CI	0.75	1	25x25		33		31	30	29	28	28	27	14													5
ACM A24*	CI	0.75	1	25x25		34		32	32	31	30	30	29	15													5
ACM A3-H	AL	0.75	1	32x25		28				24	23	23	22	22	21	20	19	18	15	14							
ACM A10*	CI	0.75	1	40x40	23									20	20	19	19	18	17	17	16	15	14	13		3	

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																		Star Rating		
						0	3.8	4.2	4.6	5.4	6.1	6.8	7.6	8.3	9.0	9.7	10.4	11.2	11.9	12.6	13.3					
						lps	0	1.1	1.2	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7				
ACM A11*	CI	0.75	1	50x40	Head in Metres	19											16	16	15	15	15	15	14	14		3
ACM A15*	AI	1.1	1.5	40x32		30					28	27	27	27	26	25	25	24	22	19	14	12				5
ACM A18*	CI	1.1	1.5	50x40		23	21	21	21	21	20	20	20	20	19	19	19	18	18	17	16	16				

\* Marked pumpsets are having ISI licence

WV - Wide voltage operation LV - Low voltage operation ES - Extension Shafts available S - Steek H - High head

# PERFORMANCE CHART

## ACM SERIES

### SINGLE STAGE CENTRIFUGAL MONOBLOCK PUMPSETS

2880 RPM, At Rated Voltage - Single Phase -220 - 240 Volts;  
Three Phase - 380 - 415 Volts, 50Hz, A.C. Supply.

Model	Body	kW	HP	Suction x Delivery in mm	DISCHARGE																	
					m <sup>3</sup> /hr	0	4.5	6.8	7.3	7.6	8.2	8.4	8.6	9.0	14.0	15.0	22.5	24.0	25.6	28.0	30.0	
					lps	0	1.3	1.9	2.0	2.1	2.2	2.3	2.4	2.5	3.9	4.2	6.3	6.7	7.1	7.8	8.3	
ACM A3(H)	AL	0.75	1	25x25	Head in Metres	34	31	30	29	29	29	29	28	28								
ACMA6* / SW/ACMA6 WW / ES	CI	0.75	1	50x50		14							14	14	13	12	12	10	9	8	8	
ACM A20*	CI	1.1	1.5	65x50		18										17	17	14	13	12	11	9
ACM A20S	CI	1.1	1.5	65x50		15									14	13	13	10	10	9	8	8
ACM A9*	CI	1.1	1.5	50x50		15											14	11	11	10		
ACM A9S	CI	1.1	1.5	50x50		14			14						14	13	12	10	9	9	6	

Model	Body	kW	HP	Suction x Delivery in mm	DISCHARGE																
					m <sup>3</sup> /hr	0	6	8	10	11	12	13	14	15	16	17	18	19	23.76		
					lps	0	1.7	2.2	2.8	3.1	3.3	3.6	3.9	4.2	4.4	4.7	5	5.3	6.6		
ACM50 & ACM50WV	CI	0.75	1	50x50	Head in Metres	14	14	14	13	13	13	12	12	12	12	11	11	10	10		
ACM 52	AF	0.75	1	50x50		15							14	13							

Model	Body	kW	HP	Suction x Delivery in mm	DISCHARGE							
					m <sup>3</sup> /hr	0	25	27	32	34	38	40
					lps	0.0	7.0	7.5	8.9	9.4	10.6	11.1
ACM-53	AF	0.75	1	80x80	Head in Metres	12	10	10	9	8	7	7

## ADM SERIES

### DOUBLE STAGE CENTRIFUGAL MONOBLOCK PUMPSETS

2880 RPM, At Rated Voltage - Single Phase -220 - 240 Volts;  
Three Phase - 380 - 415 Volts, 50Hz, A.C. Supply.

Model	Body	kW	HP	Stage	Suction x Delivery in mm	DISCHARGE								
						m <sup>3</sup> /hr	0	3	4.8	6	7.2	8.4	9.6	10.8
						lps	0	0.8	1.3	1.7	2	2.3	2.7	3.0
ADM 5	CI	1.5	2	2	40x32	Head in Metres	60	54	47	41	36	31	23	15

### MATERIAL OF CONSTRUCTION - PUMPSET

Part Name	Material
Rear Cover / Bracket	Cast Iron
Motor Frame	Cast Iron / Aluminium
Shaft	SS 410
Impeller	Cast Iron / SS 304 / Noryl
Pump Casing	Cast Iron
Mechanical Seal	Carbon & Ceramic

\* Marked pumpsets are having ISI licence

WW - Wide voltage operation LV - Low voltage operation ES - Extension Shafts available S - Sleek H - High head

# PERFORMANCE CHART



## VIRAT SERIES

### SINGLE STAGE CENTRIFUGAL MONOBLOCK PUMPSETS

2880 RPM, At Rated Voltage - Single Phase -220 - 240 Volts;  
Three Phase - 380 - 415 Volts, 50Hz, A.C. Supply.

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																Star Rating			
						0	1.37	2.20	2.59	3.78	4.18	4.61	5.40	6.12	6.84	7.56	8.28	9.00	9.72	10.44	11.16		11.88	12.60	13.32
						lps	0	0.38	0.61	0.72	1.05	1.16	1.28	1.50	1.70	1.90	2.10	2.30	2.50	2.70	2.90	3.10	3.30	3.50	3.70
VIRAT 525	AL	0.37	0.5	25x25	Head in Metres	18																			
VIRAT 525N/ES	AL	0.37	0.5	25x25		19	18	17	16	15	15	14	13	9	8										
VIRAT 525M/ES	AL	0.37	0.5	25x25		21		20	19	18	18	17													
VIRAT 525H	AL	0.37	0.5	25x25		27		24	23	22	21	20	19												5
VIRAT 1025*	AL	0.75	1	25x25		33		31	30	29	28	28													5
VIRAT 1025HH*	AL	0.75	1	25x25		34		32	32	31	30	30	29												5
VIRAT 1025M*	AL	0.75	1	32x25		28				24	23	23	22	22	21	20	19	18	15	14					
VIRAT 1040*	CI	0.75	1	40x40		23								20	20	19	19	18	17	17	16	15	14	13	3
VIRAT 1532	AL	1.1	1.5	40x32		30							28	27	27	27	26	25	25	24	22	19	14	12	

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE											
						0	6.84	7.56	8.28	9.00	9.72	10.44	11.16	11.88	12.60	13.32	
						lps	0	1.90	2.10	2.30	2.50	2.70	2.90	3.10	3.30	3.50	3.70
VIRAT 540 / ES / DF	AL	0.37	0.5	40x40	Head in Metres	15	13	13	12	12	12	11	11	10	10	7	

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE																		
						0	4.50	6.80	7.31	7.60	8.21	8.39	8.57	9.00	14.04	14.98	22.50	23.98	25.60	28.01	29.99			
						lps	0	1.25	1.89	2.03	2.11	2.28	2.33	2.38	2.50	3.90	4.16	6.25	6.66	7.11	7.78	8.33		
VIRAT 1025H	AL	0.75	1	32x25	Head in Metres	33	30	29	29	28	28	27	27	26										
VIRAT 1050 / ES	CI	0.75	1	50x50		14							14	13	12	12	10	9	8	8	8	7		
VIRAT 1525H	AL	1.1	1.5	32x25		34	31	30	29	29	29	29	28	28										
VIRAT 1550M	CI	1.1	1.5	65x50		15								14	13	13	10	10	9	8	8	8		
VIRAT 1550 / ES	CI	1.1	1.5	50x50		14			14					14	13	12	10	9	9	9	6			

Model	Body	kW	HP	Suction x Delivery in mm	m <sup>3</sup> /hr	DISCHARGE						
						0	10.80	14.40	18.00	21.60	25.20	
						lps	0	3.00	4.00	5.00	6.00	7.00
VIRAT 2050*	CI	1.5	2	50x50	Head in Metres	23	21	20	18	15	9	

MATERIAL OF CONSTRUCTION - PUMPSET	
Part Name	Material
Pump Casing	Cast Iron
Impeller	Cast Iron & Noryl
Front Bracket	Cast Iron
Motor Frame	Cast Iron & Aluminium
Back Cover	Cast Iron & Aluminium
Mechanical Seal	Carbon & Ceramic
Cooling Fan	Polypropylene
Cooling Fan Cover	Mild Steel

\* Marked pumpsets are having ISI licence      ES - Extension Shafts available      DF - Dual Flange      HH - High head



In view of continuous developments, the information / performance / specifications mentioned in this catalogue are subject to change without notice. A&R / Residential Flyer / Oct '21.