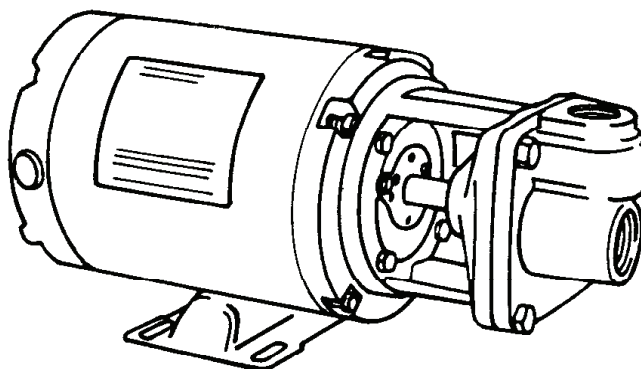


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Series: CT

Close Coupled Regenerative Turbine



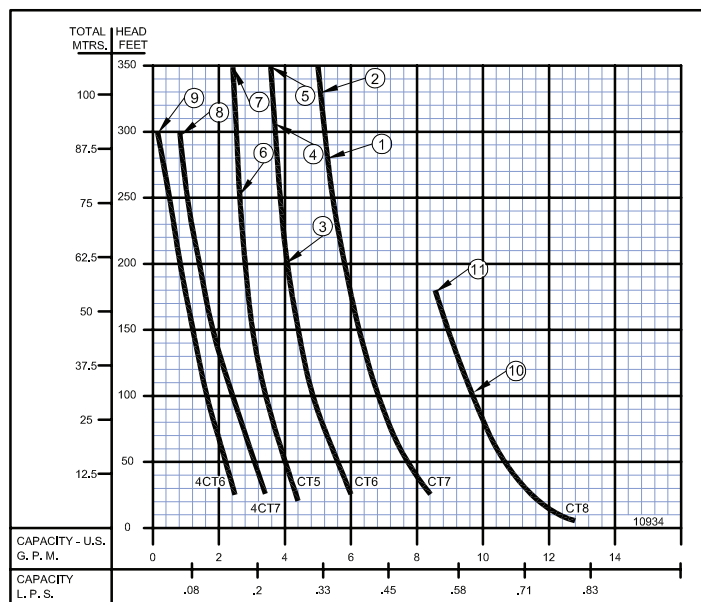
4CT - 1725 RPM - 60Hz.

CT - 3450 RPM - 60Hz.

(See Individual curves for symbol number)

*MAXIMUM HEAD			
Symbol Number	HP	Catalog Number	
		1 - Phase	3 - Phase
1	1/2	5CT7M	35CT7M
2	3/4	7CT7M	37CT7M
3	1/3	3CT6M	33CT6M
4	1/2	5CT6M	35CT6M
5	3/4	7CT6M	37CT6M
6	1/3	3CT5M	33CT5M
7	1/2	5CT5M	35CT5M
8	1/4	24CT7M	
9	1/4	24CT6M	
10	1/2	5CT8M	35CT8M
11	3/4	7CT8M	37CT8M

(*) For Standard Pumps with ODP motors



CT - 2900 RPM - 50Hz.

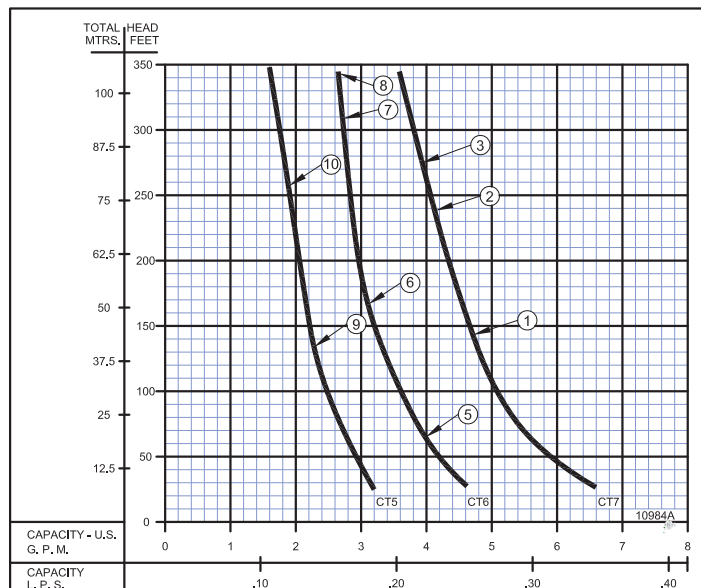
(See Individual curves for symbol number)

MAXIMUM HEAD				
Symbol Number	HP	Catalog Number	Phase	Enclosure
1	.8	L35CT7M	3	ODP
**2	1.0	TL310CT7M	3	TEFC
3	1.125	L37CT7M	3	ODP
5	.58	L33CT6M	3	ODP
6	.8	L35CT6M	3	ODP
**7	1.0	TL310CT6M	3	TEFC
8	1.125	L37CT6M	3	ODP
9	.58	L33CT5M	3	ODP
10	.8	L35CT5M	3	ODP

(*) This pump is 115/230 Volt Single Phase Only.

(**) This pump is available only with TEFC motor for 50 Hz use.

All of the pumps above are available with stuffing box.



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SECTION 7
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Series: CT

60 Hz Performance



Close Coupled Regenerative Turbine

		60 HZ - PERFORMANCE & SELECTION CHART																			
		Catalog Number		HP	Tappings		PSI Feet	TOTAL HEAD													
					Suct. NPT	Disc. NPT		8.6	17.2	26	43.3	54.1	64.9	75.8	86.6	97.4	108.3	119.1	130	140.1	151.6
		20	40					60	100	125	150	175	200	225	250	275	300	325	350		
1750 RPM	1 Phase	3 Phase					CAPACITY IN GPM														
	24CT6M	----	1/4	1	1		2.4	2.2	1.9	1.6	1.4	1.2	1.0	0.8	0.6	0.5	0.4	0.3			
	24CT7M	----	1/4	1	1		3.4	3.1	2.8	2.3	2.1	1.8	1.6	1.4	1.2	1.0	0.8	0.7			
	3CT5M 5CT5M	33CT5M 35CT5M	1/3 1/2	1 1	1 1		4.2 4.2	4.0 4.0	3.8 3.8	3.4 3.4	3.2 3.2	3.0 3.0	2.9 2.9	2.8 2.8	2.7 2.7	2.6 2.6					
3450 RPM	3CT6M 5CT6M 7CT6M	33CT6M 35CT6M 37CT6M	1/3 1/2 3/4	1 1 1	1 1 1		6.0 6.0 6.0	5.7 5.7 5.7	5.3 5.3 5.3	4.8 4.8 4.8	4.6 4.6 4.6	4.4 4.4 4.4	4.3 4.3 4.3	4.2 4.2 4.2							
	5CT7M 7CT7M	35CT7M 37CT7M	1/2 3/4	1 1	1 1		8.3 8.3	7.8 7.8	7.4 7.4	6.8 6.8	6.5 6.5	6.2 6.2	6.0 6.0	5.8 5.8	5.5 5.5						
	5CT8M 7CT8M	35CT8M 37CT8M	1/2 3/4	1 1	1 1		11.7 11.7	11.0 11.0	10.5 10.5	9.7 9.7											

* Rated to 358 ft (155 psi) per performance curve.

		60 HZ - PERFORMANCE & SELECTION CHART																			
		Catalog Number		HP	Tappings		kPa Meters	TOTAL HEAD													
					Suct. NPT (in)	Disc. NPT (in)		59	119	179	299	373	447	523	597	672	747	821	896	966	1045
		1 Phase	3 Phase					6.1	12.1	18.2	30.5	38.1	45.7	53.3	61	68.6	76.2	83.8	91.4	99.1	106.6
1750 RPM	CAPACITY IN LPS																				
	24CT6M	----	1/4	1	1		0.15	0.13	0.11	0.10	0.08	0.07	0.06	0.05	0.03	0.03	0.02	0.01			
	24CT7M	----	1/4	1	1		0.21	0.19	0.17	0.14	0.13	0.11	0.10	0.08	0.07	0.06	0.05	0.04			
	3CT5M 5CT5M	33CT5M 35CT5M	1/3 1/2	1 1	1 1		0.26 0.26	0.25 0.25	0.23 0.23	0.21 0.21	0.20 0.20	0.18 0.18	0.18 0.18	0.17 0.17	0.17 0.17	0.16 0.16			0.15 0.15	0.15 0.15	
3450 RPM	3CT6M 5CT6M 7CT6M	33CT6M 35CT6M 37CT6M	1/3 1/2 3/4	1 1 1	1 1 1		0.37 0.37 0.37	0.35 0.35 0.35	0.33 0.33 0.33	0.30 0.30 0.30	0.29 0.29 0.29	0.27 0.27 0.27	0.27 0.27 0.27	0.26 0.26 0.26			0.25 0.24 0.24	0.23 0.23 0.23	0.23 0.23 0.23		0.22
	5CT7M 7CT7M	35CT7M 37CT7M	1/2 3/4	1 1	1 1		0.52 0.52	0.49 0.49	0.46 0.46	0.42 0.42	0.41 0.41	0.39 0.39	0.37 0.37	0.36 0.36	0.34 0.34	0.34	0.33	0.32	0.32	0.31	
	5CT8M 7CT8M	35CT8M 37CT8M	1/2 3/4	1 1	1 1		0.73 0.73	0.69 0.69	0.66 0.66	0.61 0.61											

NOTE: When pumping hot water over 180°F (82.2°C), check the NPSH available in the pumping system against the required pump NPSH shown on pump performance curves. Available NPSH must be greater than required NPSH.



Series: CT

50 Hz. Performance

Close Coupled Regenerative Turbine

50 HZ - PERFORMANCE & SELECTION CHART																				
Catalog Number		HP	Tappings		PSI Feet	TOTAL HEAD														
			Suct. NPT	Disc. NPT		8.6 20	17.2 40	26 60	43.3 100	54.1 125	64.9 150	75.8 175	86.6 200	97.4 225	108.3 250	119.1 275	130 300	140.1 325	151.6 350	
1 Phase	3 Phase					CAPACITY IN GPM														
	L33CT5M L35CT5M	0.58 0.8	1 1	1 1		3.2 3.2	3.0 3.0	2.8 2.8	2.5 2.5	2.3 2.3		2.2	2.1	2.05	2.0	1.9	1.8	1.7	1.6	1.6*
	L33CT6M L35CT6M TL310CT6M L37CT6M	0.58 0.8 1.0 1.13	1 1 1 1	1 1 1 1		4.8 4.8 4.8 4.8	4.4 4.4 4.4 4.4	4.0 4.0 4.0 4.0		3.6 3.4 3.6 3.4		3.2 3.2 3.2 3.2		3.1 3.1 3.0 3.1		2.9 2.9 2.8 2.8		2.8 2.8 2.8 2.8	2.7 2.7 2.7 2.7	
	L35CT7M TL310CT7M L37CT7M	0.8 1.0 1.13	1 1 1	1 1 1		6.6 6.6 6.6	6.2 6.2 6.2	5.6 5.6 5.6	5.1 5.1 5.1	4.6 4.6 4.6	4.7 4.7 4.7		4.5 4.5 4.5	4.4 4.4 4.4	4.2 4.2 4.2					
L10CT7M	----	1.3	1	1		6.6	6.2	5.6	5.1	4.8	4.7	4.5	4.4	4.2	4.1	3.9	3.8	3.7		

* Rated to 358 ft (155 psi) per performance curve.

2900
RPM

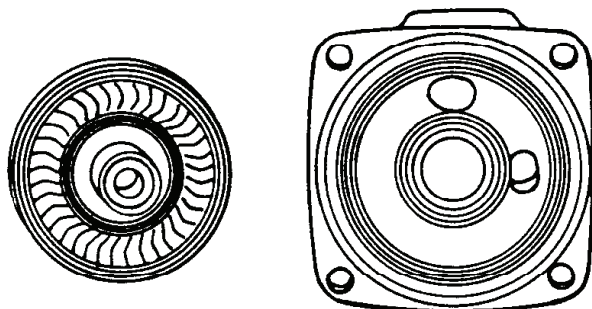
50 HZ - PERFORMANCE & SELECTION CHART																		
Catalog Number		HP	Tappings		kPa Meters	TOTAL HEAD												
			Suct. NPT (in)	Disc. NPT (in)		59 6.1	119 12.1	179 18.2	299 30.5	373 38.1	447 45.7	523 53.3	597 61	672 68.6	747 76.2	821 83.8	896 91.4	966 99.1
1 Phase	3 Phase					CAPACITY IN LPS												
	L33CT5M L35CT5M	0.58 0.8	1 1	1 1		0.20 0.20	0.18 0.18	0.17 0.17	0.15 0.15	0.14 0.14		0.13 0.13	0.12 0.12	0.12 0.12	0.11 0.11	0.11 0.11	0.10 0.10	0.10 0.10
	L33CT6M L35CT6M TL310CT6M L37CT6M	0.58 0.8 1.0 1.13	1 1 1 1	1 1 1 1		0.30 0.30 0.30 0.30	0.27 0.27 0.27 0.27	0.25 0.25 0.25 0.25	0.22 0.22 0.22 0.22	0.21 0.21 0.21 0.21	0.20 0.20 0.20 0.20	0.19 0.19 0.19 0.19		0.18 0.18 0.17 0.17	0.17 0.17 0.17 0.17	0.17 0.17 0.17 0.17	0.17 0.17 0.17 0.17	
	L35CT7M TL310CT7M L37CT7M	0.8 1.0 1.13	1 1 1	1 1 1		0.41 0.41 0.41	0.39 0.39 0.39	0.35 0.35 0.35	0.32 0.32 0.32	0.29 0.29 0.29	0.29 0.29 0.29	0.28 0.28 0.28	0.27 0.27 0.27	0.26 0.26 0.26				
L10CT7M	----	1.3	1	1		0.41	0.39	0.35	0.32	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.23

NOTE: When pumping hot water over 180°F (82.2°C), check the NPSH available in the pumping system against the required pump NPSH shown on pump performance curves. Available NPSH must be greater than required NPSH.

2900
RPM

Series: CT

Features

**Close Coupled Regenerative Turbine**

BURKS close coupled turbine pumps, Series CT, 3450 (60Hz) and 2900 (50Hz) R.P.M. and 4CT, 1725 R.P.M. are available for capacities up to 8 g.p.m. (0.50 L.P.S.) - pressures up to 150 p.s.i. (1034 kpa) and temperatures up to 225°F (107°C), come with standard mechanical shaft seal. Special shaft seals are available for higher temperatures and fluids other than water.

These compact turbine pumps are designed for pumping clear water and many other non-abrasive, lower viscosity liquids. They are especially engineered for boiler feed on steam process applications and will serve up to a 38 hp. boiler at a 3 to 1 safety factor. Available in bronze fitted as standard. All bronze or stainless steel construction also available. These pumps are recommended for many application requiring higher pressures and lower capacities.

BURKS is the only turbine pump with Life-Lok ® External Impeller Adjustment feature that allows readjustment of impeller without disturbing piping, disassembling pump or replacing parts. Gives up to 40% longer service life than turbine pumps of other designs.

MAXIMUM OPERATING CONDITIONS

TEMPERATURE (For Standard Buna-N Seal)	225°F (107°C)
INLET PRESSURE	100 PSI (689kPa)
CASING WORKING PRESSURE	250 PSI (1723kPa)
VISCOSITY	200 SSU

MOTOR INFORMATION

Standard pump motors have open drip proof construction and are rated with jet pump service factors for continuous duty operation at all ratings shown. Single phase motors are 115/230 volt, 60 Hz, capacitor start/induction run with built-in overload protection. Single phase motors 1/3, 1/2 & 3/4 HP are U.L. recognized. Three phase motors require a magnetic type starter which provides full 3-leg overload protection. Failure to use the correct starter and overloads will void the warranty. All three phase motors are 208-230/460 volt, 60/50Hz, 3450/2900 RPM.

FOR TEMPERATURES TO 500°F (260°C).

Series CT Pumps are available in a Jacketed Seal Cavity design for pumping hot oil, hot water and heat transfer fluids in common use in high temperature heating or cooling applications. This feature greatly extends seal life in high temperature applications. To order, add suffix "J" to pump catalog number for temperatures below 400°F (204°C) and add suffix "JK" to pump catalog number for temperatures over 400°F (204°). Example: 5CT5MJ. See Section on High Temperature Pumps for more information.

MATERIALS OF CONSTRUCTION

PART	BRONZE FITTED	ALL BRONZE	STAINLESS STEEL
Frame	Cast Iron	Bronze	#316 Stainless
Impeller	Bronze (Monel Blades)	Bronze (Monel Blades)	#303 Stainless
Raceway	Bronze	Bronze	#303 Stainless
Shaft	#316 Stainless	#316 Stainless	#316 Stainless
Shaft Seal	Carbon-Ceramic SS - Buna-N	Carbon-Ceramic SS - Buna-N	Carbon-Ceramic SS - Buna-N

**WARNING:**

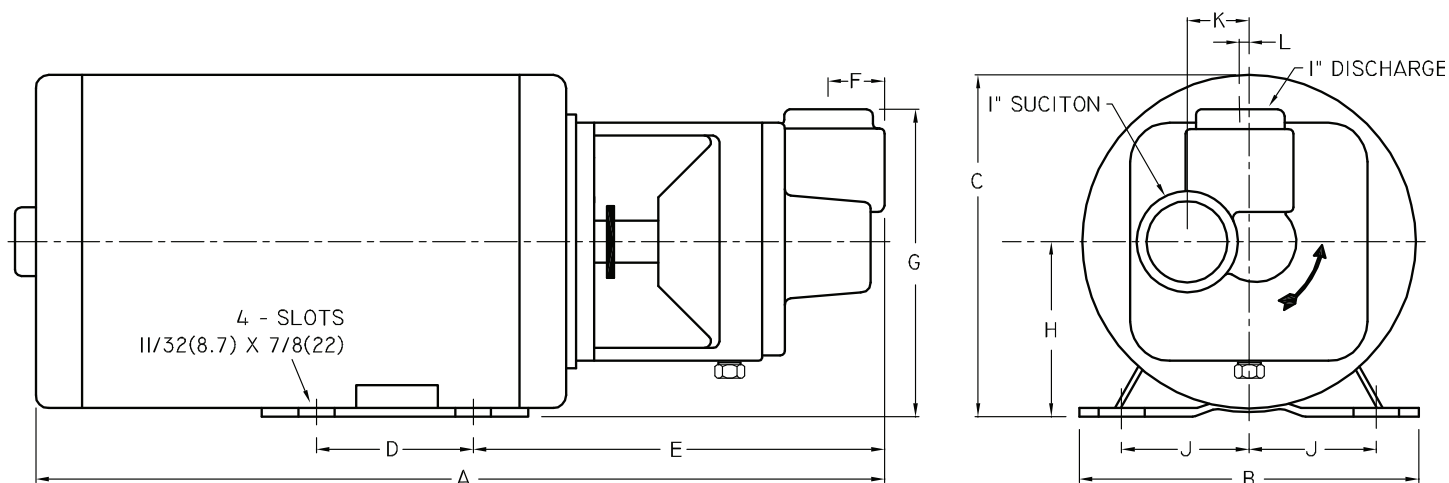
CANCER AND REPRODUCTIVE HARM -
WWW.P65WARNINGS.CA.GOV



Series: CT

Dimensions

Close Coupled Regenerative Turbine



DIMENSIONS IN INCHES (mm)																			
Series	HP	Tappings		1 PH A	1 PH A (S.S.)	3 PH A	3 PH A (S.S.)	B	C	D	E	E (S.S.)	F	F (S.S.)	G	H	J	K	L
		Disc. NPT	Suct. NPT																
4CT	1/4	1	1	16¼ (413)	16.675 (424)	----	----	6½ (165)	6⅝ (168)	3 (76)	7⅞ (200)	8⅝ ₁₆ (211)	1 (25)	1 (25)	5⅞ (149)	3½ (89)	2⅞ ₁₆ (62)	1⅝ ₃₂ (29)	⅜ ₁₆ (4.8)
CT	1/3	1	1	16¼ (413)	16.675 (424)	16¼ (413)	16.675 (424)	6½ (165)	6⅝ (168)	3 (76)	7⅞ (200)	8⅝ ₁₆ (211)	1 (25)	1 (25)	5⅞ (149)	3½ (89)	2⅞ ₁₆ (62)	1⅝ ₃₂ (29)	⅜ ₁₆ (4.8)
	1/2	1	1	16¼ (413)	16.675 (424)	16¼ (413)	16.675 (424)	6½ (165)	6⅝ (168)	3 (76)	7⅞ (200)	8⅝ ₁₆ (211)	1 (25)	1 (25)	5⅞ (149)	3½ (89)	2⅞ ₁₆ (62)	1⅝ ₃₂ (29)	⅜ ₁₆ (4.8)
	3/4	1	1	16¼ (413)	16.675 (424)	16¼ (413)	16.675 (424)	6½ (165)	6⅝ (168)	3 (76)	7⅞ (200)	8⅝ ₁₆ (211)	1 (25)	1 (25)	5⅞ (149)	3½ (89)	2⅞ ₁₆ (62)	1⅝ ₃₂ (29)	⅜ ₁₆ (4.8)

Dimensions shown above are approximate maximum dimensions for standard pumps equipped with open drip-proof motors.

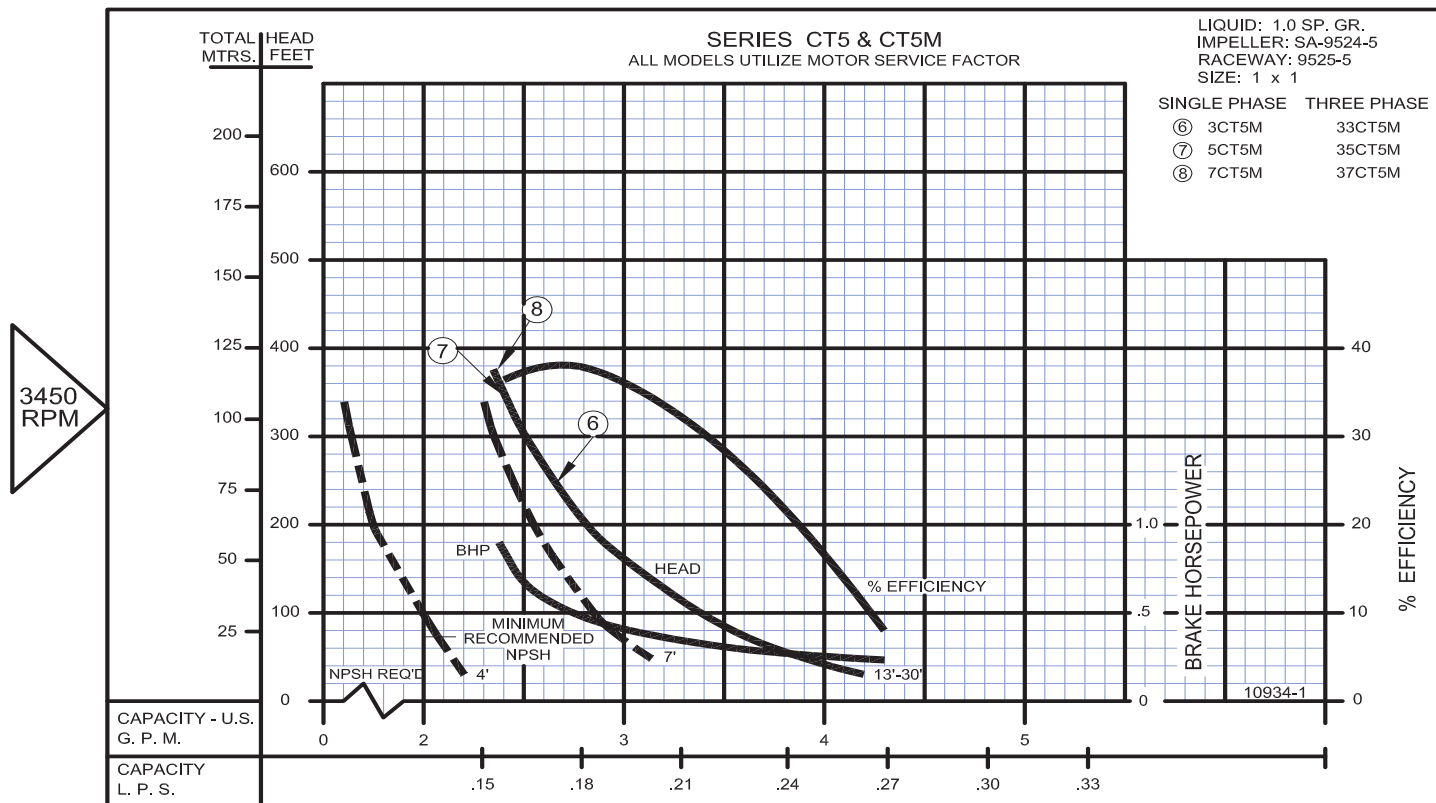
A strainer, approximately 20 mesh, should be installed on the suction side of the pump to prevent chips, scale or hard foreign particales from entering the pump and damaging the raceway and impeller.

Series: CT

60 Hz Performance

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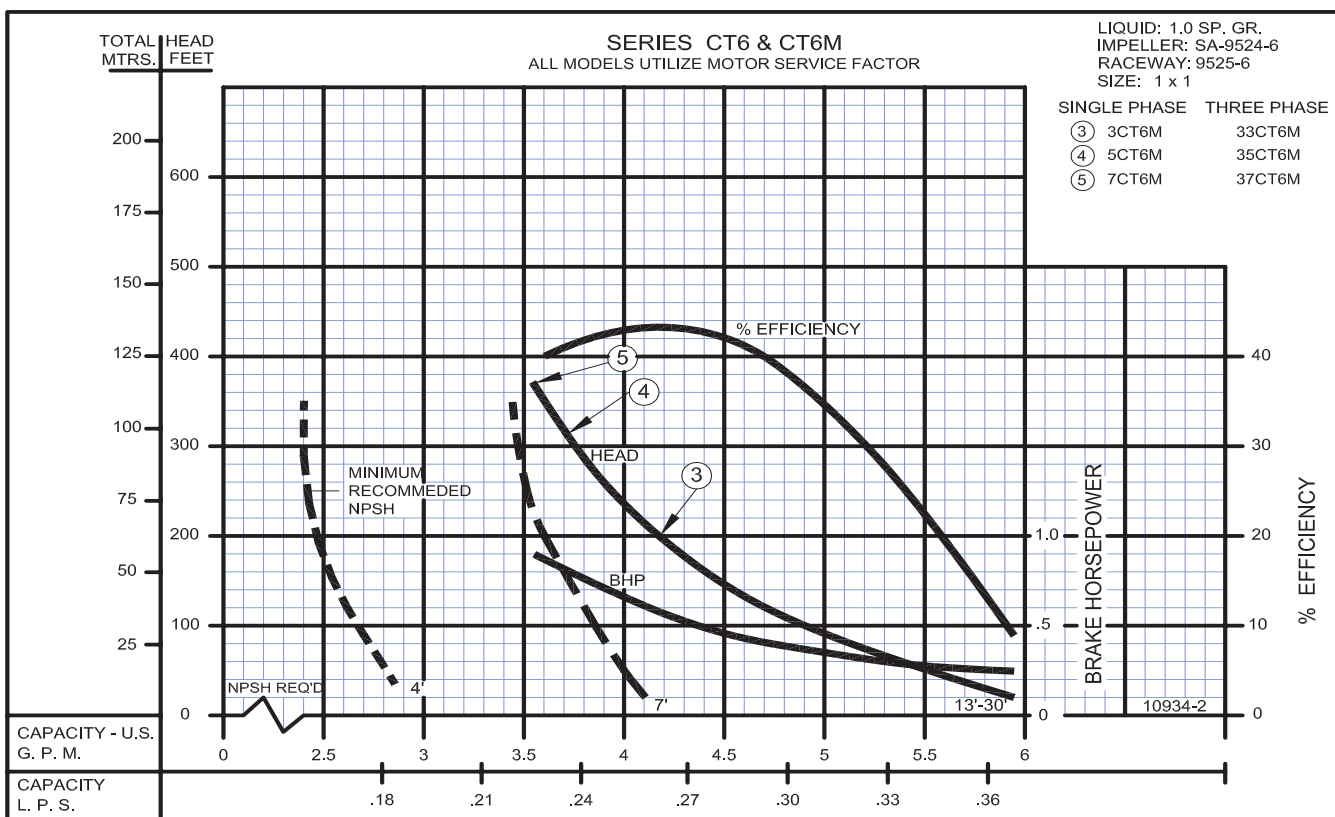
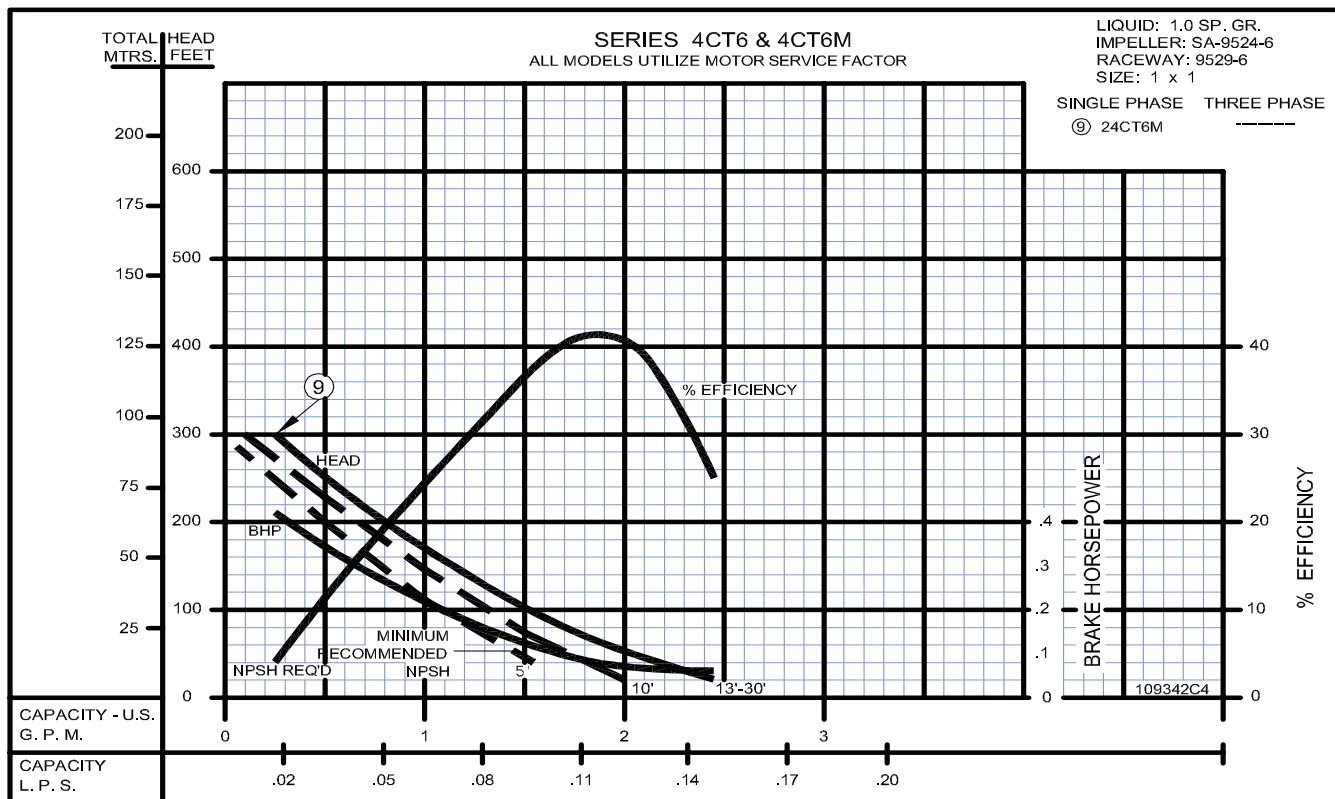
Close Coupled Regenerative Turbine



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Series: CT
60 Performance

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SERIES 4CT7 & 4CT7M
ALL MODELS UTILIZE MOTOR SERVICE FACTOR

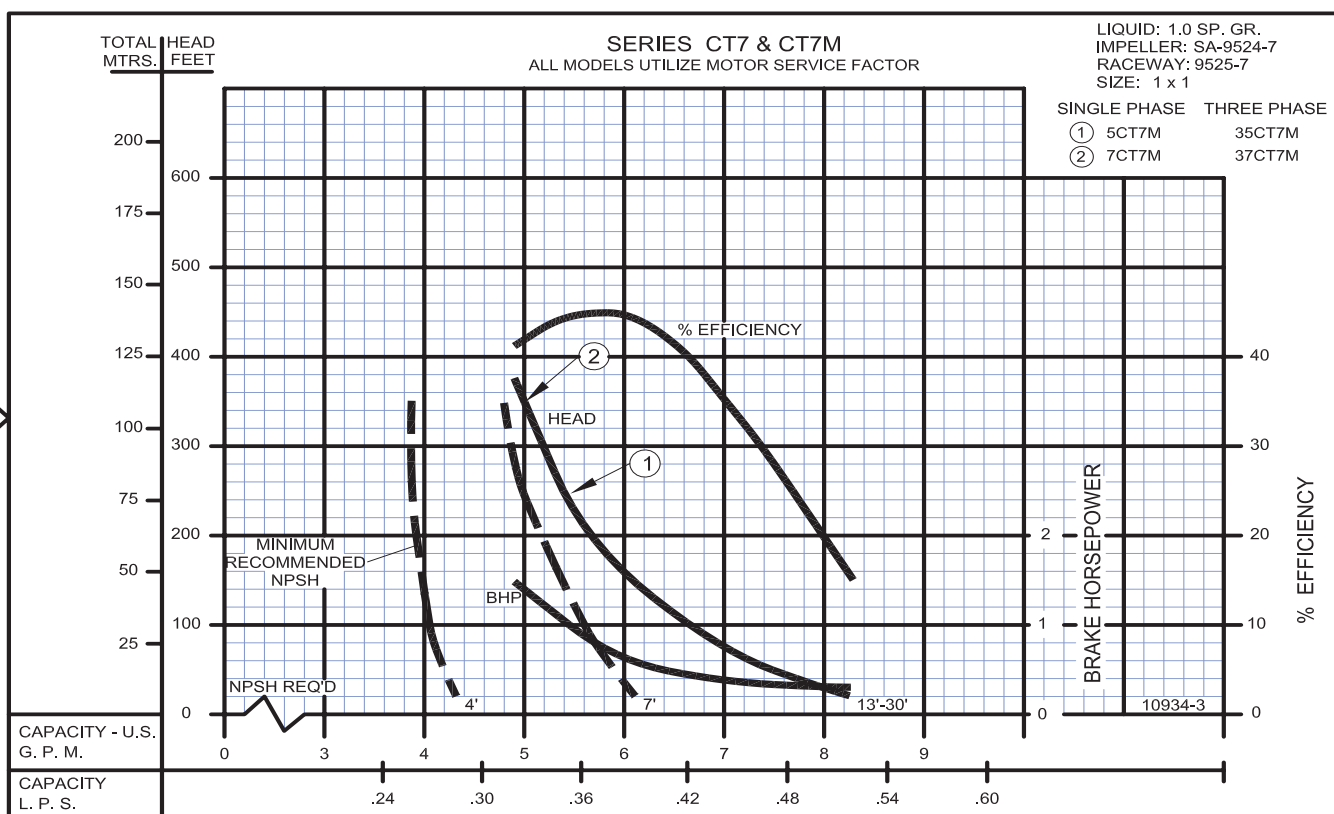
LIQUID: 1.0 SP. GR.
IMPELLER: SA-9524-7
RACEWAY: 9525-7
SIZE: 1" x 1"

SINGLE PHASE THREE PHASE
⑧ 24CT7M

The graph shows the performance characteristics of the Series 4CT7 & 4CT7M pumps. The x-axis represents Capacity in G.P.M. (0 to 3.5) and L.P.S. (0.02 to 0.20). The left y-axis represents Head in feet (0 to 200) and meters (0 to 600). The right y-axis represents % Efficiency (0 to 40) and Brake Horsepower (0 to 0.4). The graph includes curves for Head (solid line), % Efficiency (dashed line), BHP (dotted line), and NPSH (dashed line). A minimum recommended NPSH is indicated at approximately 1.1 G.P.M. and 0.14 L.P.S. The graph also shows the required NPSH for different capacities (5', 10', 13'-30').

HEAD
% EFFICIENCY
BHP
NPSH REQ'D
MINIMUM RECOMMENDED NPSH
5'
10'
13'-30'
10934-3C-4

CAPACITY - U.S. G. P. M.
CAPACITY L. P. S.

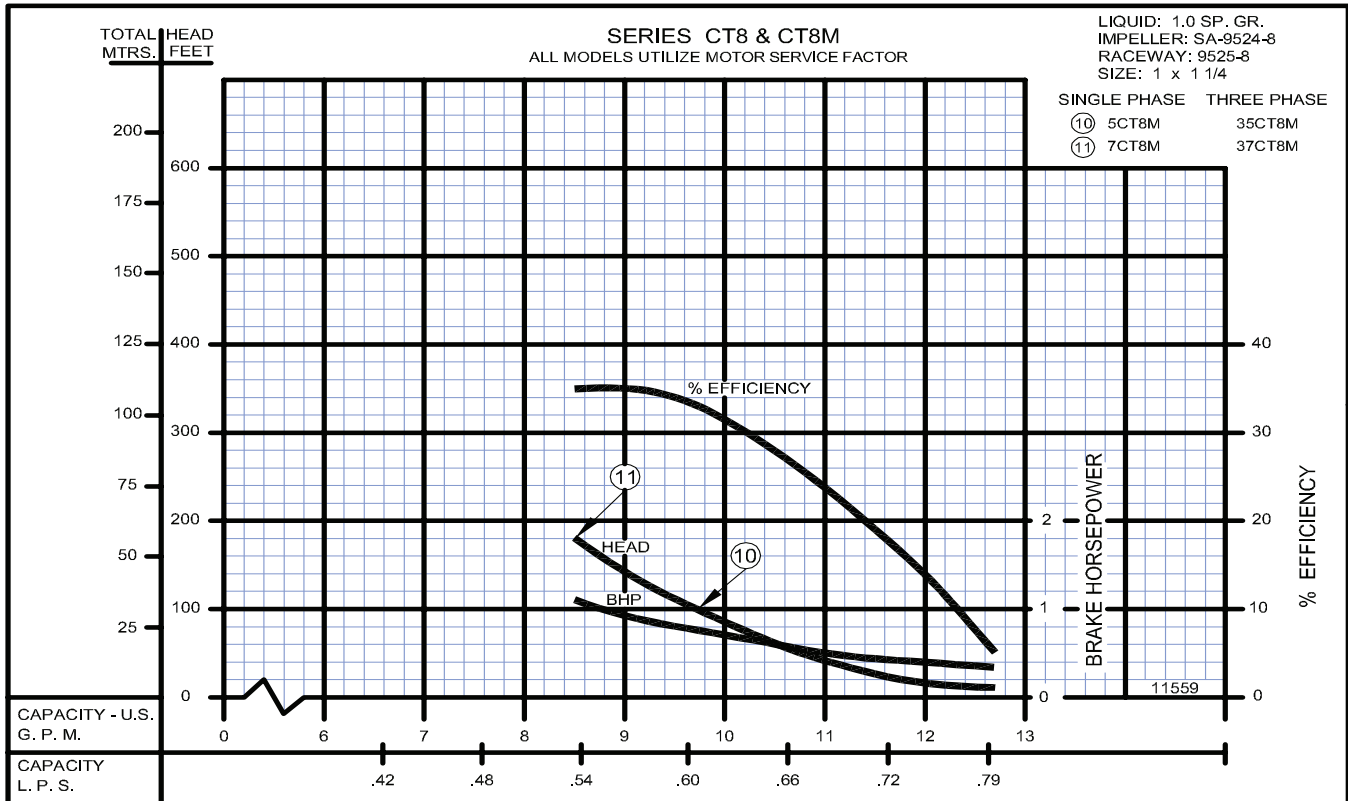




Series: CT

60 Hz. Performance

Close Coupled Regenerative Turbine

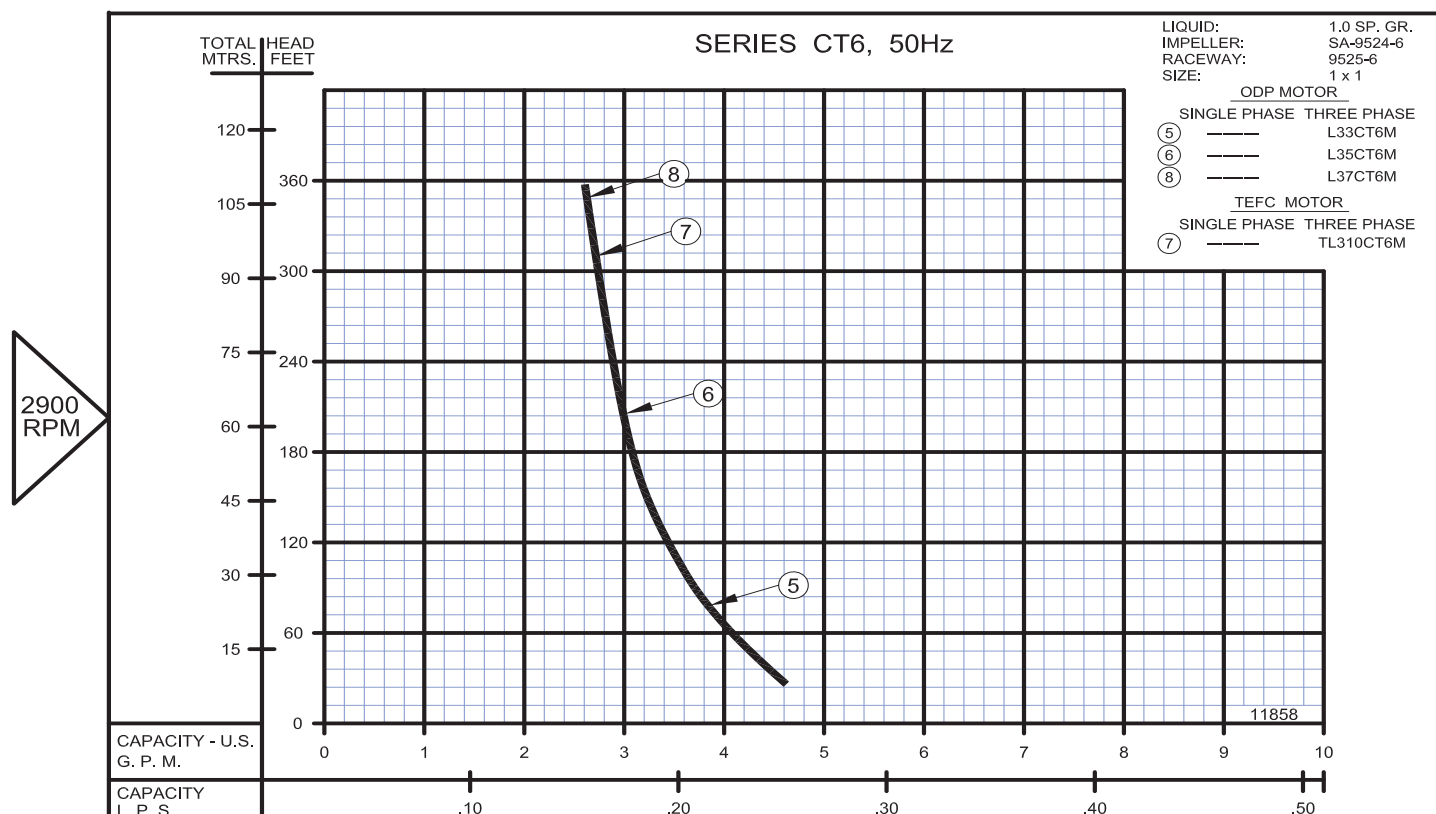
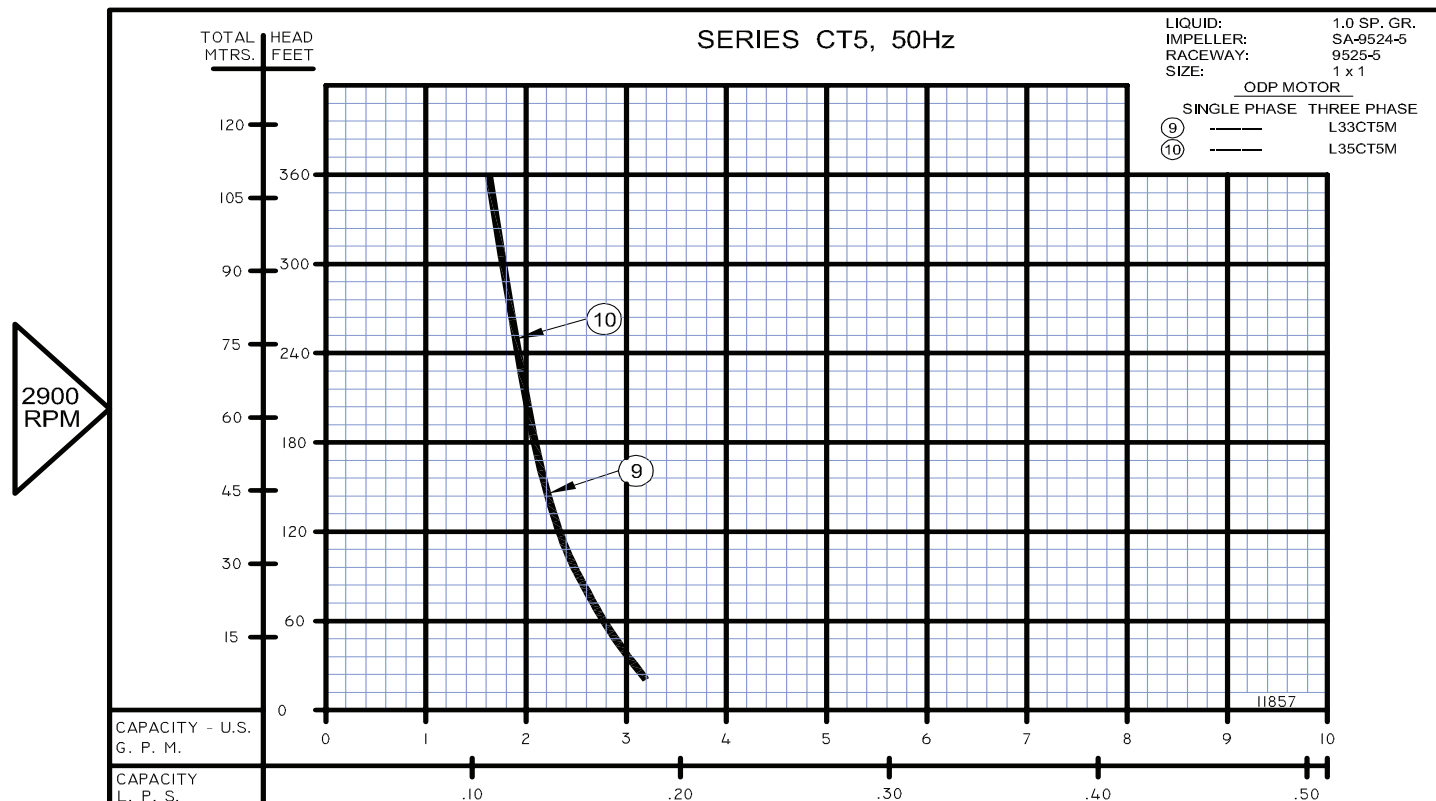


Series: CT

50 Hz. Performance

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Close Coupled Regenerative Turbine





Series: CT
50 Hz. Performance

Close Coupled Regenerative Turbine

