## **TrueTech Energy TT – FARM Series**

**The TT - FARM** series is available with storage capacities from 200 to 1,000 Liters. All tanks feature EN tank construction. With input choices as high as 90 kW on 200 through 1,000 liters models, the **TT - FARM** series can be used for maximum-demand hot water supply services

Our Flexible, Secure And Efficient Production Processes Offers High Quality Products, Satisfied Customers, Sensible Costs, Reduced Maintenance Costs, Long Service Life, Easy Installation & Commissioning And Short Lead Times

### **STANDARD FEATURES**

Hi quality electrical high power water heaters are available- in 200 to 1,000 liters storage- – vertical round, vertical square and horizontal – with energy saving performance!

- ASTM 304L Stainless steel tank (Long Service Life)
- Stainless steel heating elements (Long Service Life )
- Galvanized steel Outer jacket & control panel
- Magnesium anodes with anode tester
- Immersion type adjustable thermostat (30 °C - 90 °C)
- ASME temperature and pressure relief valve
- 4 125 PSI working pressure
- Control voltage on/off switch with pilot light
- Temperature and pressuregauges
- Glass / Rock wool insulation

**Efficiency** | All models meet or exceed ASHRAE energy efficiency standards

#### **OPTIONAL FEATURES**

- ASTM 316L Stainless steel tank Outer jacket & Control panel
- Low water cut-off
- Hi temperature cutt-off
- Warning system incase of over heating & low water level
- Step controller
- Lifting lugs
- Residual Current Device
- Hand-hole (500-liters and larger capacity- models only)
- CIRCULATING PUMP PACKAGE
- THERMO-MAGNETIC CUTOUT SWITCH
- INCOLOY SHEATH HEATING ELEMENTS

Industrial-grade Incoloy sheathed heatingelements are designed for rugged longlasting commercial service

#### Warranty

2-Year limited tank warranty-

See Commercial Warranty Certificate for - complete information

#### 100 % COMPLIANCE WITH TKDK'S REQUESTS



## TrueTech Energy TT - FARM Series

Large Volume Electric 200 to 1,000 liters Capacities Voltages: 208, 240, 277, 380, 415, 480, 600V and 690V frequencies;50/6Hz Vertical & Square and Horizontal types

# TKDK

## **TrueTech Energy TT - FARM Series**

## **ADVANCED FEATURES**

- **VOLT FREE OUTPUT CONTACTS FOR BMS**
- **4** 200 OR 240 PSI WORKING PRESSURE

## **SAFETY DOOR INTERLOCK**

Prevents opening of control panel door When heater power supply is on.

## %100 Right Product For Your System







- **4** ISOLATION VALVES (RELIABLE BALL VALVES)
- **SPECIAL SHOCK AND VIBRATION ISOLATORS**
- **LAMP TEST SYSTEMS**
- **316Ti TANK**
- **HALLOGEN FREE CABLES AND CABLE CHANNELS**
- **4** DISINFECTIVE AND PREVENTIVE SYSTEM FOR LEGIONELLA BACTERIA
- **HASE PROTECTION RELAY**
- **4** SAFETY SWITCH FOR ELECTRIC COMMAND PANEL



Factory Hydrostatic And Function Tests Before Shipping

# For additional information please call the factory with the following:

- Required gallons per hour recovery needed
- **4** Temperature rise needed
- Single or Double-Wall Coil
- ↓ If steam is the energy source, the steam pressure?
- ↓ If boiler water is the energy source, the water temperature?



# **TrueTech Energy TT - FARM Series**

## PLACE OF USAGE

## **INDUSTRIAL & COMMERCIAL**

- Industrial Type Applications
- Farms
- 🔶 Villas
- Factories
- GYMs
- Textile









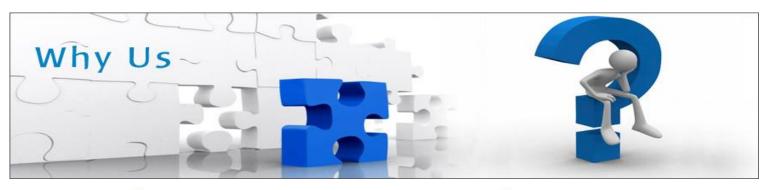










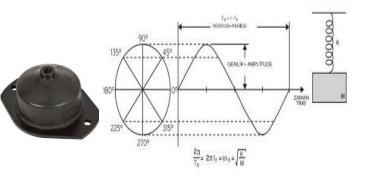


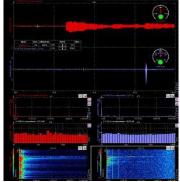


Vibration and shock analysis (on request )



Acoustic analysis (on request )







Project Management

Each Project, we will assign a Project Managerand sales person to Follow the whole process from quotation to after- sale







## **STEP 1 USING PLACE**

TT EX= LARGE CAPACITY ELECTRICAL WATTT COM= COMMERCIAL SERIES ELECTRICAL WATTT EX MAR= MARINE SERIES LARGE CAPACITY EITT CMAR= MARINE SERIES COMMERCIAL ELECTTT YMAR= YACHT SERIES ELECTRICAL WATERTT NAVY= NAVY SERIES ELECTRICAL WATER HTT FARM= FARM SERIES ELECTRICAL WATER HTT CONS= CONSTRUCTION SERIES ELECTRICALTT FLOW= INSTANT – FLOW SERIESELECTRICALTT ECO= ECONOMIC SERIES ELECTRICAL WATERTT HYD= MARINE SERIES HYDROPHORE TANHSTEP IIDESIGN	VATER HEATER LECTRICAL WATER HEATER TRICAL WATER HEATERS HEATERS EATERS EATERS WATER HEATERS WATER HEATERS TANKLESS WATER HEATERS TER HEATERS FER HEATERS STEP VI VOLTAGE . PHASE . FREQUENCY
EN = EN PRESSURE VESSEL CODE	STEP VII MATERIAL
AS = ASME BOILER AND PRESSURE VESSEL UL = UL ELECTRIC BOOSTER AND COMMERCIAL STORAGE TANK WATER HEATER	G = GALVANIZE COATING SS 304 = 304 QUALITY STAINLESS STEEL SS 304L = 304L QUALITY STAINLESS STEEL SS 316 = 316 QUALITY STAINLESS STEEL SS 316L = 316L QUALITY STAINLESS STEEL
STEP III CONTROLLER TYPE	SS 316Ti = 316Ti QUALITY STAINLESS STEEL SS CNF = CuNiFe COPPER-NICKEL-IRON ALLOYS SS CN = CuNi 90/10 COPPER – NICKEL ALLOYS
MC = MECHANICAL DG = DIGITAL PL = PLC SS = SOLID STATE	SS DX = DUBLEX

**STEP IV STORAGE CAPACITY** 

STEP V KW

# TrueTech Energy TT - FARM Series / TABLES



RECOVERY CAPACITIES													
INPUT KW	EQUIVALENT BTU/H.	UNITS	40°F (22°C)	50°F (28°C)	60°F (33°C)	70°F (39°C)	80°F (45°C)	90°F (50°C)	100°F (56°C)	110°F (61°C)	120°F (67°C)	130°F (72°C)	140°F (78°C)
6	20473,00	LPH ( LT/H)	235,0	188,0	157,0	134,0	117,0	104,0	94,0	85,0	78,0	72,0	67,0
0	20473,00	GPH ( GAL/H)	62,0	50,0	41,0	35,0	31,0	28,0	25,0	23,0	21,0	19,0	18,0
9	30709,00	LPH ( LT/H)	352,0	282,0	235,0	201,0	176,0	157,0	141,0	128,0	117,0	108,0	101,0
	30703,00	GPH ( GAL/H)	93,0	74,0	62,0	53,0	47,0	41,0	37,0	34,0	31,0	29,0	27,0
12	40946,00	LPH ( LT/H)	470,0	376,0	313,0	268,0	235,0	209,0	188,0	171,0	157,0	145,0	134,0
		GPH (GAL/H)	124,0	99,0	83,0	71,0	62,0	55,0	50,0	45,0	41,0	38,0	35,0
15	51183,00	LPH (LT/H)	587,0	470,0	391,0	335,0	294,0	261,0	235,0	213,0	196,0	181,0	168,0
		GPH (GAL/H)	155,0	124,0	103,0	89,0	78,0	69,0	62,0	56,0	52,0	48,0	44,0
18	61416,00	LPH (LT/H)	705,0	564,0	470,0	403,0	352,0	313,0	282,0	256,0	235,0	217,0	201,0
		GPH (GAL/H)	186,0	149,0	124,0	106,0	93,0	83,0	74,0	68,0	62,0	57,0	53,0
24	81888,00	LPH (LT/H)	939,0 248,0	751,0	626,0	537,0	470,0	417,0	376,0	342,0 90,0	313,0	289,0	268,0
		GPH (GAL/H) LPH (LT/H)	248,0 1174,0	199,0 939,0	165,0 783,0	142,0 671,0	124,0 587,0	110,0 522,0	99,0 470,0	90,0 427,0	83,0 391,0	76,0 361,0	71,0 335,0
30	102360,00	GPH (GAL/H)	310,0	248,0	207,0	177,0	155,0	138,0	124,0	113,0	103,0	95,0	89,0
		LPH (LT/H)	1409,0	1127,0	939,0	805,0	705,0	626,0	564,0	512,0	470,0	434,0	403,0
36	122832,00	GPH (GAL/H)	372,0	298,0	248,0	213,0	186,0	165,0	149,0	135,0	124,0	115,0	106,0
		LPH (LT/H)	1761,0	1409,0	1174,0	1006,0	881,0	783,0	705,0	640,0	587,0	542,0	503,0
45	153540,00	GPH (GAL/H)	465,0	372,0	310,0	266,0	233,0	207,0	186,0	169,0	155,0	143,0	133,0
	101010.00	LPH (LT/H)	2114,0	1691,0	1409,0	1208,0	1057,0	939,0	845,0	769,0	705,0	650,0	604,0
54	184248,00	GPH (GAL/H)	558,0	447,0	372,0	319,0	279,0	248,0	223,0	203,0	186,0	172,0	160,0
60	204720.00	LPH (LT/H)	2347,0	1878,0	1567,0	1340,0	1173,0	1045,0	939,0	856,0	780,0	719,0	674,0
	204720,00	GPH (GAL/H)	620,0	496,0	414,0	354,0	310,0	276,0	248,0	226,0	206,0	190,0	178,0
72	245664,00	LPH (LT/H)	2816,0	2256,0	1877,0	1615,0	1408,0	1249,0	1128,0	1022,0	939,0	871,0	803,0
12	245004,00	GPH ( GAL/H)	744,0	596,0	496,0	426,0	372,0	330,0	298,0	270,0	248,0	230,0	212,0
90	307080,00	LPH ( LT/H)	3518,0	2765,0	2346,0	1985,0	1720,0	1548,0	1382,0	1269,0	1156,0	1075,0	992,0
	307080,00	GPH ( GAL/H)	930,0	730,0	620,0	525,0	455,0	409,0	366,0	336,0	306,0	284,0	262,0



# **TrueTech Energy TT - FARM Series / TABLES**

MODEL NUMBERS								
TT FARM SERIES       INPUT       KW								
6	TT FARM-EN-MC-200-6	TT FARM-EN-MC-300-6	TT FARM-EN-MC-400-6	TT FARM-EN-MC-500-6	TT FARM-EN-MC-750-6	TT FARM-EN-MC-1000-6		
12	TT FARM-EN-MC-200-12	TT FARM-EN-MC-300-12	TT FARM-EN-MC-400-12	TT FARM-EN-MC-500-12	TT FARM-EN-MC-750-12	TT FARM-EN-MC-1000-12		
15	TT FARM-EN-MC-200-15	TT FARM-EN-MC-300-15	TT FARM-EN-MC-400-15	TT FARM-EN-MC-500-15	TT FARM-EN-MC-750-15	TT FARM-EN-MC-1000-15		
18	TT FARM-EN-MC-200-18	TT FARM-EN-MC-300-18	TT FARM-EN-MC-400-18	TT FARM-EN-MC-500-18	TT FARM-EN-MC-750-18	TT FARM-EN-MC-1000-18		
24	TT FARM-EN-MC-200-24	TT FARM-EN-MC-300-24	TT FARM-EN-MC-400-24	TT FARM-EN-MC-500-24	TT FARM-EN-MC-750-24	TT FARM-EN-MC-1000-24		
30	-	TT FARM-EN-MC-300-30	TT FARM-EN-MC-400-30	TT FARM-EN-MC-500-30	TT FARM-EN-MC-750-30	TT FARM-EN-MC-1000-30		
36	-	TT FARM-EN-DG-300-36	TT FARM-EN-DG-400-36	TT FARM-EN-DG-500-36	TT FARM-EN-DG-750-36	TT FARM-EN-DG-1000-36		
45	-	TT FARM-EN-DG-300-45	TT FARM-EN-DG-400-45	TT FARM-EN-DG-500-45	TT FARM-EN-DG-750-45	TT FARM-EN-DG-1000-45		
54	-	-	TT FARM-EN-DG-400-54	TT FARM-EN-DG-500-54	TT FARM-EN-DG-750-54	TT FARM-EN-DG-1000-54		
60	-	-	TT FARM-EN-DG-400-60	TT FARM-EN-DG-500-60	TT FARM-EN-DG-750-60	TT FARM-EN-DG-1000-60		
72	-	-	-	TT FARM-EN-DG-500-72	TT FARM-EN-DG-750-72	TT FARM-EN-DG-1000-72		
90	-	-	-	TT FARM-EN-DG-500-90	TT FARM-EN-DG-750-90	TT FARM-EN-DG-1000-90		

# **TrueTech Energy TT - FARM Series / TABLES**



ELECTRIC WATER HEATERS

HEATING TIMES								
He	Heating Times (ΔT = 37 °C)							
T	ANK CAPACIT	Y (LITER	)					
00	400	500	750	1000				
,1 min	172,1 min	215,1 min	322,7 min	430,2 min				
5 min	86 min	107,6 min	161,3 min	215,1 min				
6 min	68,8 min	86 min	129,1 min	172,1 min				
min	57,4 min	71,7 min	107,6 min	143,4 min				
3 min	43 min	53,8min	80,7 min	107,6 min				
8 min	34,4 min	43 min	64,5min	86 min				
5 min	28,7 min	35,9 min	53,8 min	71,7 min				
<b>)</b>	22.0 min	20.7 min	12 main	$\Gamma 7.4$ main				

	Heating Times ( $\Delta T = 37 ^{\circ}C$ )									
INPUT KW	TANK CAPACITY (LITER)									
	200	300	400	500	750	1000				
6	86 min	129,1 min	172,1 min	215,1 min	322,7 min	430,2 min				
12	43 min	64,5 min	86 min	107,6 min	161,3 min	215,1 min				
15	34,4 min	51,6 min	68,8 min	86 min	129,1 min	172,1 min				
18	28,7 min	43 min	57,4 min	71,7 min	107,6 min	143,4 min				
24	21,5 min	32,3 min	43 min	53,8min	80,7 min	107,6 min				
30	-	25,8 min	34,4 min	43 min	64,5min	86 min				
36	-	21,5 min	28,7 min	35,9 min	53,8 min	71,7 min				
45	-	17,2 min	22,9 min	28,7 min	43 min	57,4 min				
54	-	-	19,1 min	23,9 min	35,9 min	47,8 min				
60	-	-	17,2 min	21,5 min	32,3 min	43 min				
72	-	_	-	17,9 min	26,9 min	35,9 min				
90	-	-	-	14,3 min	21,5 min	28,7 min				



# **Product and Technical Support**

# **TrueTech Energy**

Although out of sight, the Truetech heater keeps on working, 24/7, year after year

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