

TEMPERATURE CONTROLLED INDUCTION TYPE STIRRER

Feed back controlled

INTRODUCTION:

MIT series of temperature controlled induction type stirrer finely and homogeneously mix the fluid irrespective of its volume, weight or its rheological properties at preset speed. fluids under heating, using feedback/ feed forward control topologies These finds application in Pharmaceutical, Cosmetics & Synthetics, genetic engineering, Petrochemical, Paper and Environments application Metal Finishing and Corrosion Control ,petrochemical , Polymer manufacturing , Medicines, biotechnology, medicine , Process control and Chemical Engineering ,Semiconductors/ Ceramics application .Company also offer impeller type stirrer.

Benefits:

These induction stirrer generates rotating magnetic field when its phase sifted magnetic coil are excited by high frequency time phase shifted electric current. Under the influence of these rotating field the magnetic pallet rotates and stirs the liquid at synchronous preset speed. These stirrers are compact, hygienic, trouble free motor less operation/control, corrosion resistance, fine speed control ,less electricity consumption, with fine temperature control to the resolution of 0.1°C (0.01°C optional) Electronic display for temperature/stirring speed of fluid. It also offer thermally synchronized speed control with additional speed profile control at option. Digital induction type stirrer tank are Cermic/teflon/glass coated hygienic/ corrosion resistant Digital induction type stirrer surface



MIT-03020



MIT-03020



optional(impeller type stirrer)
200.0 < Pr < 50000 watts

Electrical and mechanical specifications of Digital induction type stirrer

Model:	MIT-00320	MIT-00520	MIT-01020	MIT-03020	MIT-05020	MIT-10020
Capacity/size (liter/ inches)	3.0/(option)	5.0/(option)	10.0/(option)	30.0/(option)	50.0/(option)	100.0/(option)
Operating volt/power(volt/watts)	220/100	220/200	220/500	220/750	220/1000	220/2000
R.P.M. control range	1000/2000/3000	1000/2000/3000	1000/2000/3000	1000/2000/3000	1000/2000/3000	1000/2000/3000
Resolution of R.P.M.	0.1/0.01	0.1/0.01	0.1/0.01	0.1/0.01	0.1/0.01	0.1/0.01
Accuracy of R.P.M.	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Response time-mili sec	10	12	16	23	36	50
% overshoot	Critically damp	Critically damp	Critically damp	Critically damp	Critically damp	Critically damp
Settling time-mili second	60	70	80	90	100	110
Control scheme	Feedforward/cascade	Feedforward/cascade	Feedforward/cascade	Feedforward/cascade	Feedforward/cascade	Feedforward/cascade
Temperature control range ^o C	-50 to 400	-50 to 400	50 to 400	-50 to 400	50 to 400	-50 to 400
Temperature sensor type	thermopile	thermopile	thermopile	thermopile	thermopile	thermopile

Technical data of Digital induction type stirrer controllers.

Operating power supply : 220 volts/50HZ or 110 volts D.C.

Power : 50 Watts to 10 kilo watts

R.P.M./Temperature control range : 3000/ -100 to 400^o C.

Resolution in R.P.M./ temperature control : 1.0/ 0.1^oC (0.01^o C optional)

Accuracy in R.P.M./ temperature control : 99.9% of set point

Display accuracy : temperature/R.P.M.

Permissible humidity : 90%

Permissible ambient temperature : 60^oC

Protection : overload/short circuit.

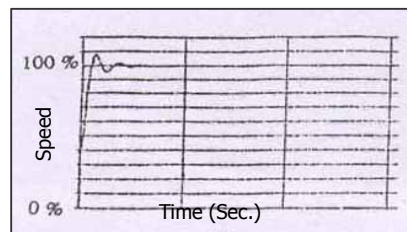
Power efficiency : 95%

Cooling : air cooled

Control : feed back/feed forward RPM/ temperature control /with profile control as preset / with 0-12 volts D.C. signal output. Automatic control according to preset profile w.r.t. time with high degree of repeatability and accuracy. Digital display for temperature, stirring speed (optional). Facility to interface with PC.

Dimension of controller:

MITSC-00320 10X06X06 MITSC-05020 16X14X14 MITSC-01020 12X10X10
MITSC-00520 12X08X08 MITSC-10020 12X10X10 MITSC-20020 12X10X10



Digital induction type stirrer

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