

TruONE™ feature comparison

Main features in the table below. Consult ABB for more information.



	Level 2 controls	Level 3 controls	Level 4 controls
Ampere sizes available	IEC: 200-1600 A UL: 30-1200 A	IEC: 200-1600 A UL: 30-1200 A	IEC: 200-1600 A UL: 30-1200 A
Rated voltage	200-480Vac	200-480Vac	200-480Vac
Rated frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phase system	Single and Three	Single and Three	Single and Three
Number of poles	2, 3 and 4	2, 3 and 4	3 and 4
Neutral configuration			
Switched	Yes	Yes	Yes
Overlapping	No	Yes	Yes
Product type			
Open transition (I-II)	Yes	Yes	Yes
Delayed transition (I-O-II)	Yes	Yes	Yes
Voltage and frequency settings			
Pick up Voltage Source 1	Fixed 2% above drop out	71-99%, 101-119%	71-99%, 101-119%
Drop out Voltage Source 1	+/-5, 10, 15, 20%	70-98%, 102-120%	70-98%, 102-120%
Pick up Voltage Source 2	Fixed 2% above drop out	71-99%, 101-119%	71-99%, 101-119%
Drop out Voltage Source 2	+/-5, 10, 15, 20%	70-98%, 102-120%	70-98%, 102-120%
Pick up Frequency Source 1	Fixed 1% above drop out	80.5-99.5%, 100.5-119.5%	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 1	+/-5, 10 %	80-99%, 101-120%	80-99%, 101-120%
Pick up Frequency Source 2	Fixed 1% above drop out	80.5-99.5%, 100.5-119.5%	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 2	+/-5, 10 %	80-99%, 101-120%	80-99%, 101-120%
Time delay settings			
Override momentary Source 1 Outage, sec	0, 1, 2, 3, 4, 5, 10, 15, 20, 30	0-60	0-60
Transfer from Source 1 to Source 2, sec	2 (0-3600 via Ekip Connect)	0-3600	0-3600
Override momentary Source 2 Outage, sec	2 (0-60 via Ekip Connect)	0-60	0-60
Transfer from Source 2 to Source 1, min	0, 1, 2, 3, 4, 5, 10, 15, 20, 30	0-120	0-120
Generator stop delay, min	30 secs or 4 mins	0-60	0-60
Center-OFF delay, sec	0 or 4	0-300	0-300
Pre-transfer delay S1 to S2, sec	No	0-300	0-300
Post-transfer delay S1 to S2, sec	No	0-300	0-300
Pre-transfer delay S2 to S1, sec	No	0-300	0-300
Post-transfer delay S2 to S1, sec	No	0-300	0-300
Elevator Pre-signal delay S1 to S2, sec	No	0-60	0-60
Elevator Post-signal delay S1 to S2, sec	No	0-60	0-60
Elevator Pre-signal delay S2 to S1, sec	No	0-60	0-60
Elevator Post-signal delay S2 to S1, sec	No	0-60	0-60
Load shed delay, sec	No	0-60	0-60

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	Level 2 controls	Level 3 controls	Level 4 controls
Source failure detections			
No voltage	Yes	Yes	Yes
Undervoltage	Yes	Yes	Yes
Overvoltage	Yes	Yes	Yes
Phase missing	Yes	Yes	Yes
Voltage unbalance	Yes	Yes	Yes
Invalid frequency	Yes	Yes	Yes
Incorrect phase sequence	Yes	Yes	Yes
Features			
Controls	DIP + keys	LCD + keys	Touch + keys
LED indications for ATS, S1 and S2 status	Yes	Yes	Yes
Open transition - Standard digital inputs/outputs	0 / 1	1 / 1	2 / 1
Delayed transition - Standard digital inputs/outputs	1 / 1	2 / 1	3 / 1
Programmable digital inputs/outputs	No	Yes	Yes
Auto config (voltage, frequency, phase system)	Yes	Yes	Yes
Source priority	Source 1, No priority	Source 1/2, No priority	Source 1/2, No priority
Manual retransfer	Yes	Yes	Yes
In-phase monitor (synchro check)	Yes	Yes	Yes
Local genset exercising: on-load, off-load	via HMI	via HMI, digital inputs	via HMI, digital inputs
Scheduled genset exercising: on-load, off-load	via Ekip Connect	via HMI, Ekip Connect	via HMI, Ekip Connect
In-built power meter module	No	No	Yes
Load shedding	No	Yes	Yes
Real time clock (48h back-up after power outage)	via Ekip Connect	via HMI, Ekip Connect	via HMI, Ekip Connect
Event log	via Ekip Connect	via HMI, Ekip Connect	via HMI, Ekip Connect
Predictive maintenance	No	No	Yes
Harmonics measuring	No	Voltage	Voltage, current
Field-mount accessories			
Auxiliary contacts for position indication	Yes	Yes	Yes
Digital input/output modules	No	Yes	Yes
12-24 Vdc aux supply module for controller	No	Yes	Yes
Communication modules	No	Yes	Yes
Connectivity			
Modbus RTU (RS-485)	No	Yes	Yes
Modbus/TCP	No	Yes	Yes
Profibus DP	No	Yes	Yes
ProfiNet	No	Yes	Yes
DeviceNet	No	Yes	Yes
Ethernet IP	No	Yes	Yes
Ekip Com Hub (monitoring via ABB Ability™: EDCS)	No	Yes	Yes
For applications			
Mains - Mains	Yes	Yes	Yes
Mains - Generator ¹⁾	Yes	Yes	Yes

¹⁾ Contact ABB for applications with smaller than 20 kVA gensets