



Continuous Run Mode Conveyor

Example Architecture and Bill of Materials

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This type of conveyor would be suitable in situations where a design would require:

Simple automation solution managing a modular, stand-alone conveyor in “continuous” running mode with a duty cycle < 12 start/hour.

Automatic start and stop at the end to avoid material drop

Management of material accumulation is not required

The solution is economic and robust with simple electromechanical components and maximum motor protection. The material detection is done by sensors at both ends of the conveyor.

In this example the motors selected for the different conveyor sections are respectively 0,37 kW, 0,75 kW & 1,5 kW power.

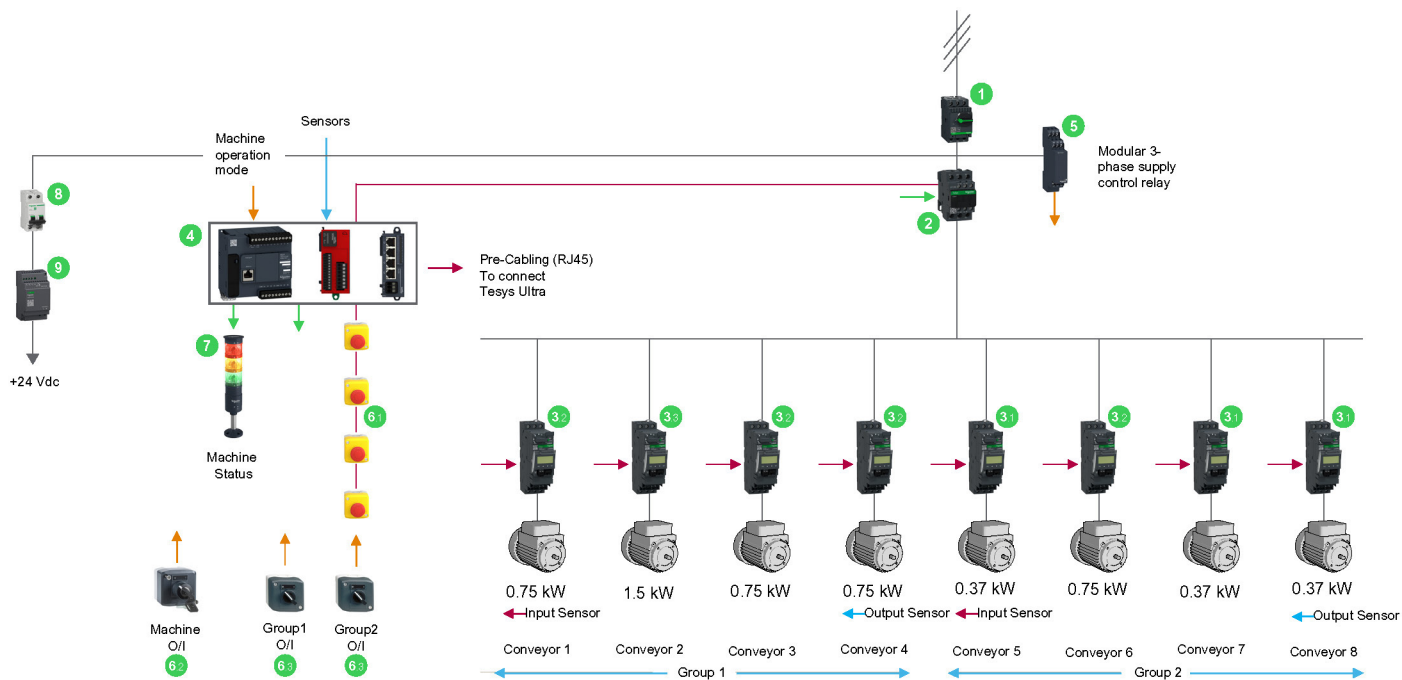
Key differentiators of stand-alone conveyors:

- Simple economic, robust and reliable transportation systems
- Economic transmission designed with asynchronous motor and gearbox for speeds up to 1.5m/s
- Easy installation and on-site commissioning
- Simple maintenance, requiring only basic electrical skills reducing maintenance costs

Why choose Schneider Electric for stand-alone conveyors:

- Robust and validated automation architecture
- Maximum motor protection using Tesys U high performance MCB providing total coordination motor protection and minimum machine downtime
- Logic controller with Safety card allows Cat 3 Emergency Stop loop monitoring
- Multi standard components available worldwide
- Incomparable long lifespan, thanks to robust and reliable Schneider Electric parts well recognized inside the conveying tough application since more than 30 years

Designing a stand-alone conveyor: Continuous run mode machine



Offer list – Continuous run mode machine	#	Products	Descriptions	Qty
TeSys Power GV2L - Motor circuit breaker	1	GV2L22	3 pole AC-3, 25A, magnetic motor circuit breaker, rotary handle	1
TeSys Deca - LC1D Contactor	2	LC1D25E7	3 pole AC-3 440V AC, 25A contactor, 1NO + 1NC auxiliary contacts, 48V AC coil	1
Tesys Ultra, all-in-one compact motor starter (0.37 KW)	3.1	LUB120	Advanced power base, TeSys U, 3P, 12A/690V	3
		LUCD1XBL	Advanced control unit, TeSys U, 1.25 - 5A, 3P motors, protection & diagnostic, class 20, coil 24V DC	3
		LUFC00	Parallel wiring module - for motor starter TeSys U	3
		LU9BN11C	pre-wired connection - for LUB - coil to communication module	3
Tesys Ultra, all-in-one compact motor starter (0.75 KW)	3.2	LUB120	Advanced power base, TeSys U, 3P, 12A/690V	4
		LUCD05BL	Advanced control unit, TeSys U, 1.25 - 5A, 3P motors, protection & diagnostic, class 20, coil 24V DC	4
		LUFC00	Parallel wiring module - for motor starter TeSys U	4
		LU9BN11C	pre-wired connection - for LUB - coil to communication module	4
Tesys Ultra, all-in-one compact motor starter (1.5 KW)	3.3	LUB120	Advanced power base, TeSys U, 3P, 12A/690V	1
		LUCD05BL	Advanced control unit, TeSys U, 1.25- 5A, 3P motors, protection & diagnostic, class 20, coil 24V DC	1
		LUFC00	Parallel wiring module - for motor starter TeSys U	1
		LU9BN11C	pre-wired connection - for LUB - coil to communication module	1
Modicon M221 - Logic Controller	4	TM221C40U	gic controller M221, 40 I/O, transistor PNP, Ethernet and serial line ports	1
		TM3SAC5R	Modicon TM3 Safety module - 1 Function, Cat 3 PL d/SIL CL2 (screw) 24Vdc	1
		TM3XTYS4	Modicon TM3 - 4 Tesys motors interface	1
Harmony RM - Control relays	5	RM17TG00	Modular 3-phase supply control relay	1
Harmony XALK - Control station, plastic, yellow cover	6.1	XALK178E	Control station with 1 emergency switching off function - 1 NO + 1 NC	4
Harmony XALD - Control station, plastic, dark grey cover	6.2	XALD144	Control station with 1 selector key switch Ø22, 1 NO, legend holder marked O-I	1
	6.3	XALD134	Control station with 1 selector switch, Ø22, 1 NO, legend holder marked O-I	2
Harmony XVU - Tower light	7	XVUZ400	Fixing plate with 400 mm aluminium pole for modular tower lights, black, Ø60	1
		XVUC21B	Base unit with top cover for modular tower lights, black, Ø60, 24 V AC/DC	1
		XVUC9S	Audible unit, black, Ø60, buzzer; 24 V AC/DC	1
		XVUC24	Illuminated LED unit for modular tower lights, red, Ø60, steady, IP65, 24 V AC/DC	1
		XVUC25	Illuminated LED unit for modular tower lights, orange, Ø60, steady, IP65, 24 V AC/DC	1
		XVUC23	Illuminated LED unit for modular tower lights, green, Ø60, steady, IP65, 24 V AC/DC	1
Multi9 C60N	8	M9F12202	2 pole - 2A - courbe D - 415V AC, 10kA miniature circuit breaker	1
Modicon ABL - Power supply	9	ABLXXXX	Single phase and 3-phase power supplies 100 V to 500 V - 7 W to 960 W	1