Qty	Description	Manufacturer	Manufacturer PN	Vendor	Vendor PN	Cost	Notes
1	Enclosure, NEMA 4X, 6.732" L x 4.764" W x 2.165" D, Plastic, Gray Body, Clear Cover	Bud Industries	PN-1324-CMB	DigiKey	377-1892-ND	$20.70	
1	Faceplate, Acrylic, Custom	TinkerMill					
1	Light Pipe, Round Domed, Clear, Diffused, 3mm Dia, 0.25" Length	Visual Communications Company	LFB025CTP	DigiKey	LFB025CTP-ND	$0.36	
1	Raspberry Pi 3 B+	Raspberry Pi Foundation	Pi 3 B+	SparkFun	DEV-14643	$39.95	
1	Memory Card, microSD, 16GB, Class 10	SanDisk	SDSQUAR-016G-GN6MA	Amazon	SDSQUAR-016G-GN6MA	$6.19	
1	TinkerAccess Hat, v1.4	TinkerMill					
1	LCD, 16x2 SerLCD, Black on RGB, 3.3V	SparkFun	LCD-14072	SparkFun	LCD-14072	$19.95	
1	Adapter, Qwiic	SparkFun	DEV-14495	SparkFun	DEV-14495	$1.50	Needs to be soldered to LCD I2C and power pins
1	Cable, Qwiic, 100mm	SparkFun	PRT-14427	SparkFun	PRT-14427	$1.50	Connects LCD to TinkerAccess Hat
1	Switch, Pushbutton, Red, SPDT, Momentary	C&K	PNP8S3D2C03QE	Mouser	611-PNP8S3D2C03QE	$8.00	
4	Machine Screw, Nylon, Pan Head, Phillips, #2-56 x 1/2"	B&F Fastener Supply	NY PMS 256 0050 PH	DigiKey	H534-ND	$0.09	Mounting LCD to Faceplate
4	Round Spacer, Nylon, 3/16" Dia, #2, 3/16"	Bivar Inc	9913-187	DigiKey	492-1043-ND	$0.04	Between LCD and Faceplate
4	Hex Nut, Nylon, #2-56	Essentra Components	0400256HN	DigiKey	RPC7088-ND	$0.06	Mounting LCD to Faceplate
4	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 3/8"	B&F Fastener Supply	NY PMS 440 0038 PH	DigiKey	H544-ND	$0.09	Mounting Faceplate to Enclosure Standoff
4	Hex Standoff, Aluminum, 1/4" Hex, Male-Female #4-40, 1-1/4" Length	Keystone	8407	DigiKey	36-8407-ND	$1.02	Between Faceplate and Enclosure
8	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 1/4"	B&F Fastener Supply	NY PMS 440 0025 PH	DigiKey	H542-ND	$0.09	Mounting Faceplate to PCB Standoff & Raspberry Pi to PCB Standoff
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #4-40, 1/4" Length	RAF Electronic Hardware	4501-440-AL	DigiKey	1772-1230-ND	$0.29	Between TinkerAccess Hat and Faceplate
4	Hex Standoff, Nylon, 3/16" Hex, Female-Female #4-40, 5/8" Length	RAF Electronic Hardware	2059-440-N	DigiKey	1772-1853-ND	$1.89	Between TinkerAccess Hat and Raspberry Pi
						$112.79	

RefDes	Qty	Description	Manufacturer	Manufacturer PN	Vendor	Vendor PN	Cost	Notes
	1	Enclosure, NEMA 12/13, 12 x 12 x 6in (HxWxD), Wall Mount, Carbon Steel, Gray Powder Finish, Hinged Screw Cover	Hubbell-Wiegmann	WA121206GIE	Automation Direct	WA121206GIE	$96.00	
	1	Subpanel, Carbon Steel, White, Polyester Powder Coat Finish. For use with 12x12 WA121206GIE Enclosure	Hubbell-Wiegmann	N1P1212	Automation Direct	N1P1212	$9.50	
	1	Ground Bus Bar, 7 Terminal	Square D	PK7GTACP	Home Depot	578-169	$5.70	
	1	DIN Rail, Slotted, 35mm, 7.5mm height, 1m length, Plated Steel. Pkg of 2	Konnect-It	DN-R35S1-2	Automation Direct	DN-R35S1-2	$10.00	
	1	Terminal Block, Single-Level, Size 26 - 12 AWG, Gray, 20A, 600V Rated, 35mm DIN Rail Mount, Pkg of 25	Konnect-It	KN-T12GRY-25	Automation Direct	KN-T12GRY-25	$6.50	
	1	Terminal Block End Cover, Gray, For use with KN-T12 to KN-T6 Series Terminal Blocks, Pkg of 25	Konnect-It	KN-ECT6GRY-25	Automation Direct	KN-ECT6GRY-25	$4.00	
	1	Terminal Block Separator, Gray, For use with KN-T12 to KN-T6 Series Block, Pkg of 25	Konnect-It	KN-ST1GRY	Automation Direct	KN-ST1GRY	$8.00	
	1	Terminal Block End Bracket, Screw-Down Type, 10mm Wide, For use with 35mm DIN Rail, Pkg of 10	Konnect-It	KN-EB7-10	Automation Direct	KN-EB7-10	$6.50	
	1	Terminal Block Jumper, Screw-Down Type, 2-Pole, For use with KN-T12 or KN-D12 Series Block, Pkg of 25	Konnect-It	KN-2J12	Automation Direct	KN-2J12	$8.00	
BD1	1	SparkFun Beefcake Relay Control Kit (Ver. 2.0)	SparkFun	KIT-13815	SparkFun	KIT-13815	$8.95	
CB1	1	Circuit Breaker, FAZ Series, 480Y/277VAC, 96VDC, 2 Pole, 5A, D Trip Curve	Eaton	FAZ-D5-2	Automation Direct	FAZ-D5-2	$20.00	
CB2	1	Circuit Breaker, FAZ Series, 277VAC, 48VDC, 1 Pole, 3A, C Trip Curve	Eaton	FAZ-C3-1-SP	Automation Direct	FAZ-C3-1-SP	$10.00	
K1	1	Contactor, Duo Series, 3 Pole, 220VAC Coil, 50A Inductive Load, 65A Resistive Load	Fuji Electric	SC-E2S-220VAC	Automation Direct	SC-E2S-220VAC	$70.00	
K1	1	Auxiliary Contact, front mount, (1) N.O./(1) N.C. contact(s), 10A @ 600 VAC. For use with contactor SC-E2S(G)	Fuji Electric	SZ-A11T	Automation Direct	SZ-A11T	$8.75	
K2	1	Solid State Relay, SPST-NO, Random Turn-on, 3-32 VDC Input, 10A / 24-280 VAC Load	Automation Direct	AD-SSR810-DC-28R	Automation Direct	AD-SSR810-DC-28R	$21.50	
RV1	1	Varistor, Coil Surge Suppressor, 100-250V AC/DC, For SC-E1-xxx to SC-E4xxx Contactor	Fuji Electric	SZ-Z32	Automation Direct	SZ-Z32	$15.00	
LP1	1	Indicator Lamp. Green, LED, Panel Mount, 125-250V	Bulgin	LE2951WL5G	DigiKey	1091-1118-ND	$7.05	
LP2	1	Flashing Beacon, Red, LED, 85-265VAC, 1/2" NPT mount	ESafety Lights, LLC	B45L4PACT	Amazon	B45L4PACT	$59.99	
PS1	1	Power Supply, 85-264VAC Input, 5V/3A/15W Output	Mean Well	HDR-30-5	DigiKey	1866-2246-ND	$19.12	
CT1	1	Current Transformer, 2000:1 turn ratio, 30A	Echun	ECS1030-L72	SparkFun	SEN-11005	$9.95	
R1	1	Resistor, 470, 5%, 1/4W, Axial						
R2,R3	2	Resistor, 1K, 5%, 1/4W, Axial						
ES1	1	Enclosure, Pushbutton, 1 hole, 22mm, 70 x 70 x 74mm (HxWxD), Wall Mount, Thermoplastic ABS, Gray, Screw cover	Pilot Devices	SA103SL	Automation Direct	SA103SL	$8.25	
ES1	1	Pushbutton, 22mm, Twist-to-release, Emergency Stop, (1) N.C. contact, Red mushroom Operator, 40mm	Pilot Devices	GCX1131	Automation Direct	GCX1131	$13.50	
ES1	1	Legend Plate, Oversized, Round, Yellow field, Yellow background, Black engraved text, Marking "EMERGENCY STOP"	Pilot Devices	ECX1651	Automation Direct	ECX1651	$2.75	
SW1	1	Keyed Switch						
							$429.01	